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APPLETON'S RAILWAY SERIES

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TRAFFIC MANAGEMENT

APPLETON'S RAILWAY SERIES

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TRAFFIC MANAGEMENT

By G. LLOYD WILSON

D. APPLETON & COMPANY, NEW YORK

TRAFFIC MANAGEMENT

BY

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TO

**THE OFFICERS AND MEMBERS OF THE
SHIPPERS' REGIONAL ADVISORY BOARDS,
IN APPRECIATION OF THEIR SPLENDID
SERVICES IN THE IMPROVEMENT OF
AMERICAN TRANSPORTATION
THIS VOLUME IS DEDICATED**

PREFACE

Rapid strides forward have been taken in the transportation world since 1920. The complex problems of transportation have received much careful attention and helpful comment. The management of traffic and transportation departments of industrial and business concerns has been especially stressed and has become an outstanding subject in the discussion of transportation problems.

Much scientific literature has been produced by students of transportation upon financial, engineering, operating, and traffic subjects as related to railroads, express companies, and steamship companies. Little has been written, however, concerning the management of traffic and transportation from the standpoint of the industrial and commercial traffic manager.

Traffic departments in industrial establishments and commercial organizations have been in existence in a number of business enterprises for more than forty years. The number of departments and the importance of these organizations have been increasing from year to year as the services that a well-equipped traffic department is able to render have been impressed upon the minds of business executives. The effects of the World War upon transportation and traffic management have been very marked. War industries as well as other industrial and commercial organizations were faced during the war period by new transportation problems, and traffic departments were demonstrated to be necessities. Since the War many new traffic departments have been organized, and departments that

had already been in existence have been augmented in personnel and scope.

The term "traffic management" as it is used in this treatise refers to the management of traffic and transportation affairs by men employed by industrial concerns, commercial organizations, and other business enterprises. These men are the buyers of transportation services that are offered to the shipping public by railroads, steamship lines, express companies, and motor haulage companies. The term is not to be confused with the same term as it is used in connection with the selling of transportation services by the traffic managers of the carriers. Between the traffic managers of the carriers and those of industries and commercial organizations there is an intimate business relationship and a unique form of professional coöperation, but there is no confusion in the functions of the two. Both classes of traffic men have their own tasks to perform in the administration of transportation problems for their respective industries, but their mutual coöperation tends to the improvement of transportation services which are made available to all users of transportation.

Industrial traffic managers may be differentiated from commercial traffic managers in that the former attend to the transportation interests of individual industrial concerns while the latter function for commercial organizations—chambers of commerce, boards of trade, trade associations, community business organizations, and similar groups of users of transportation. The differences in their functions justify the making of the distinction. The problems of both are covered in the following chapters.

Part I of the book discusses the functions and services of representative industrial traffic organizations. The place of the traffic manager in commerce and industry, the scope and functions of industrial traffic management, and the division of industrial traffic departments into functional

classes are defined. The organization and methods of procedure of traffic departments in attending to the duties of traffic management are discussed in Chapters III to XII inclusive. The shipping, receiving, plant transportation, local motor transportation, rate, tariff, routing, tracing, expediting, and freight claims bureaus of traffic departments are analyzed, and the methods employed in performing these functions by successful departments are presented in detail.

Part II presents the organization and administration plans of industrial and commercial traffic departments. Two hundred industrial traffic department organizations have been analyzed and arranged in four typical classes, each representing a composite picture of representative departmental organization. The types of departments range from those that attend only to the "nonphysical" traffic functions to the "complete" industrial traffic departments that attend to shipping, receiving, local, plant, and motor transportation in addition to the so called "nonphysical" functions.

The traffic departments of commercial bodies—trade associations, chambers of commerce, and civic traffic development bureaus—have been examined and their organizations and functions described.

The procedure used by representative traffic department managers in the administration of their departments, the selection and training of personnel, distributing assignments, office management and arrangement, are discussed in Chapter XV.

Part III presents the broader field of traffic management represented in the work of traffic service bureaus which act as the traffic departments of groups of clients.

Chapter XVII discusses the work of industrial and commercial traffic managers in presenting complaints and proposals before traffic committees and state and Federal

regulatory bodies. Chapter XVIII concludes the volume with a discussion of coöperation in the field of transportation.

The book has been undertaken with the hope that an examination of the modes of organization, methods of administration, and plans of managerial control of representative traffic departments will be of interest and of assistance to those already in the profession and to those who are preparing to enter it. With this information, students of traffic and transportation, traffic managers, and business executives who are interested in establishing new traffic departments or remodeling already existing ones, have the experience of representative departments as a guide to the solution of their problems.

The material for the book has been collected painstakingly over a period of more than eight years, during which time the author has been connected with the traffic profession as traffic manager of the Chester Shipbuilding Company, Ltd., and the Merchant Shipbuilding Corporation; as lecturer in interstate commerce and traffic management at Temple University; as soliciting freight agent of the Southern Steamship Company; and as assistant professor of commerce and transportation at the Wharton School of the University of Pennsylvania.

The author is indebted to more than two hundred industrial and commercial traffic managers for their helpful coöperation. Included in this group are officers and members of the National Industrial Traffic League, of Shippers' Regional Advisory Boards, of commercial traffic managers' associations, and the secretaries and traffic commissioners of a number of chambers of commerce, trade associations and other commercial bodies.

Particularly is he indebted to the following members of the industrial and commercial traffic profession for their constructive criticisms and services in reading the manu-

script: George P. Wilson, commerce counsel, Philadelphia; Frank A. Bedford, division freight agent, American Bridge Company, Philadelphia; Theodore B. Sage, traffic manager, Phoenix Bridge Company, Phoenixville and Philadelphia; G. O'Neill Hodge, assistant traffic manager, Phoenix Bridge Company; George B. Nuzum, traffic manager, Fall River, Mass., Chamber of Commerce; and A. C. Albee, traffic manager, National Retail Dry Goods Association, New York.

To Professors Emory R. Johnson and Grover G. Huebner, for their helpful guidance and constructive criticism, the author is especially grateful.

It is the author's hope that this pioneer volume may arouse new interest in the problems of industrial and commercial traffic management, so that others may continue the discussion and new treatises be stimulated into being with the result that the business world may know what is being done and what can be done by industrial and commercial traffic managers for the betterment of American industry and commerce.

G. L. W.

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PART I

FUNCTIONS AND SERVICES

TRAFFIC MANAGEMENT

CHAPTER I

THE RÔLE OF THE TRAFFIC DEPARTMENT IN MODERN INDUSTRY

The Value of Traffic Departments to Business Enterprise

The transportation problem confronts every industrial and commercial organization in the United States. One of the most vital and most urgent economic problems with which every industry is concerned is that of obtaining adequate transportation service by rail, water, and highway at reasonable rates. The importance of this problem is now generally appreciated, and efforts are being made by industrial and commercial interests, as well as by the Federal and state governments, to agree upon a transportation program that will protect the interests of all concerned. The ultimate goal of all so-called "solutions" to the transportation problem is the assurance of a transportation system that is well equipped to supply adequate transportation service at reasonable rates.

More and more clearly it is being impressed upon the government, the carriers, and the shippers that their interests are really identical. An efficient transportation system can be assured only when the interests of these three groups are adjusted to the common good of all. In the past, unfortunately, the hostility of the shipping public was often aroused against the carriers. The carriers in their turn were often suspicious of the motives and actions of the shippers. Both shippers and carriers were apt to look

askance at the interference by state and Federal governments in business matters. The feeling of mutual hostility and suspicion of these interests had their origin in the high-handed practices of certain roads earlier in the history of railroad transportation and in the petty retaliatory tactics employed by some shippers and legislators.

This situation, fortunately, is rapidly ceasing to be. Feelings of rivalry and distrust are being replaced by a sense of mutual responsibility on the parts of shippers, carriers, and the government. The Transportation Act of 1920, among other things, not only amplifies the powers of the Interstate Commerce Commission to regulate railway rates and fares, but charges the Interstate Commerce Commission with the responsibility of establishing rates by groups that are estimated to be sufficiently remunerative to yield a fair return to efficiently managed carriers on the property used in transportation service. Shippers realize that adequate service can be expected only at fair rates and that the carriers can furnish transportation service only when they are reasonably compensated. Rates sufficient to attract adequate supplies of needed new capital, to the extent approved by the regulatory powers, must be established as compensation for efficient transportation service.

These considerations, very briefly referred to here, have been studied seriously by students of transportation during the past thirty-five years. Ever since the beginning of national railway regulation in 1887, these problems have become annually more important. The situation has given rise to the industrial and commercial traffic departments that now are found in the organizations of virtually all large industrial and commercial enterprises and in many smaller establishments. Many of these departments are managed by men familiar with shipping procedure, who are charged with the responsibility of obtaining adequate transportation service at reasonable rates for their respective

employers. The increasing importance of distribution in the cost of doing business, has greatly accentuated the need for the traffic manager, for his work consists in effecting the most expeditious and effective distribution of the products of the industry at the least possible expense and with a minimum of inconvenience.

The transportation facilities provided by the rail, water, and highway carriers are auxiliary branches of the manufacturing plants and commercial houses of the United States. Traffic management consists in the efficient and economical utilization of the available services to the best interests of the industries of the country.

The Old Ideal of the Traffic Manager

The old conception of an industrial or commercial traffic manager, current during the riotous days of special privileges and rebates, was often that of a man sufficiently familiar with the inner workings of the carriers to obtain whatever rebates could be obtained and honest enough to turn over to his employer any rebates he received from the carriers' agents. Such men were usually recruited from among the ranks of the railroad, express, and steamship company employees. He was expected to be familiar with the rates of freight—in effect, to know the rules and ratings of the freight classifications and shipping requirements, and to be able to read a freight tariff sufficiently well to enable him to check freight bills with a fair degree of accuracy. Unusually low rates were often accorded by the carriers to certain shippers whose tonnage the railways or the traffic associations needed particularly for pooling purposes. These industries, perceiving their important strategic positions, bargained through their traffic managers with the representatives of the carriers for lower and ever lower rates and special favor after special favor. These abuses, common enough some years ago, have been so corrected by

antitrust and railway regulation of the past four decades as to require no further discussion here. The successful traffic manager during this period was one who could drive *the best bargain for his employers with the railroads. Little consideration was given to the welfare of the carriers or the general standard of service given by the carriers to other shippers or the public in general. A better rate for the industry meant a wider radius of activity, the ultimate elimination of competitors who were not given preferential rates, and the consequent expansion of the unduly favored industries.*

Effect of Railroad Regulation upon Traffic Management

When the Federal government became active in the regulation of carriers after 1887—forbidding unduly preferential service and treatment, and compelling the elimination of rebating—the executive heads of a number of industries apparently presumed that the heyday of the traffic manager was over. Many assumed that a traffic clerk could check freight bills for overcharges, and that a practical shipper could pack and ship outbound freight. Such men were employed at salaries much less than those ordinarily received by traffic managers.

This conception of the scope of the work of the traffic department completely overlooked all but the routine detail work of the department. Shipping and receiving freight and checking freight bills are but the beginning, the most elementary phases of traffic work. To these rudimentary functions must be added the selection of routes over which freight is to move; the preparation and presentation of claims against the carriers for loss, damage, and overcharge; the analysis of classification ratings accorded to commodities bought and sold by the industry or commercial establishment; the analysis of rates paid by the industry to determine their effect upon business; the obtaining of ade-

quate car supply; the drawing-up of packing specifications to enable freight to be shipped safely and economically; the organization and supervision of local transportation service to and from freight depots; the arrangement for internal plant switching, whether this service is performed by the carriers or by the plant's own motive power; the analysis of the sources of supply of raw materials and of the markets of the finished products, to determine whether the industry is obtaining the benefit of the lowest prices and rates on its inbound material and taking advantage of the most favorable markets in which to distribute the industry's products. All these functions, and many more, all of which will be discussed later, are duties of the industrial traffic department. Federal and state regulatory acts have brought about a legal and economic background to traffic management that has changed the status of traffic management from a clerical to a professional vocation.

The New Field of Traffic Management

To handle this work properly, so vital to efficient distribution, transportation experts are retained by many industries throughout the United States to represent their interests. The importance of the work of commercial and industrial traffic managers is coming to be appreciated not only by commerce and industry but by the carriers as well. The industrial or commercial traffic manager, technically trained in transportation economics and traffic procedure, is welcomed by the carriers as a trained collaborator in the field of producing, selling, and buying transportation on a fair basis to all concerned.

Students of economics throughout the world, and particularly in the United States and Great Britain, are becoming aware of the importance of the transportation utility problem to commerce and industry. Adequate wages must be paid by the carriers to attract and retain efficient em-

ployees, reasonable returns must be paid to security holders to retain old and to secure new investments, and the utilities must be permitted to charge rates sufficient to defray these costs, to operate and to maintain the properties adequately, and to lay aside a reasonable surplus after all requirements for labor, materials, interest, and dividends have been met. In no other way can efficient transportation be obtained and an efficient transportation system built up for the use of the shippers of freight. The well-informed industrial or commercial traffic manager appreciates the significance of these fundamental problems and interprets his duty as that of a skilled and intelligent user and conservator of transportation facilities. His task is one of coöperation with the carriers rather than of antagonism.

Within recent years, especially since the passage of the Transportation Act of 1920, the subject of industrial and commercial traffic management has received a considerable amount of attention from business executives and from students of business organization and management.

H. A. Palmer, the editor of the *Traffic World*, has said repeatedly that the day is coming when the traffic man will be as important and as powerful as the attorney to whom the head of the business turns for advice and whose advice he does not question. The lawyer knows the law, and that ends it. The real traffic man knows the traffic business and what transportation measures are best for his own business and for all business.

Hubert T. Parsons, President of the F. W. Woolworth Company, addressed the New York Shippers' Conference in New York City, in 1923, on the subject of "The Value of the Traffic Manager in Business." Mr. Parsons spoke as a high executive of one of the largest commercial organizations of the world, one which maintains warehouses in a number of large cities of the United States and operates more than 1,200 retail stores in every section of the United

States and in a number of Canadian cities. Mr. Parsons' remarks, quoted here in part, are significant and represent the viewpoint of the executive heads of great commercial and industrial organizations:

A well organized and well manned traffic department is a great asset—not only a financial but a good-will asset—for your business.

To give some idea of the possibilities of a traffic department,—during the year 1922 our traffic department effected a saving of \$45,000 by weighing freight and express shipments at the time of delivery and comparing the actual weights with the billed weights and checking the charges to see if the proper classifications and rates were assessed.

It took several years for our traffic department to become self-supporting and show a profit. Although we have an executive office traffic department and a district traffic representative with a full staff in eleven district offices, each of which takes care of its local conditions in the various sections of the country, we find for the year ending December 31, 1921, after charging off all cost of operation, the traffic department showed a net profit of over \$163,000, which was increased to \$212,000 in 1922, and we are quite sure will show an additional increase in 1923. This satisfactory result only goes to show the possibilities when a traffic department has good organization and functions properly.

In addition to this financial saving, there is an unaccounted-for saving in reduction in classification and rates, which has been brought about by our traffic department. This is an unknown saving.

One of the most important duties of a traffic manager is to keep in close touch with the carriers' agents, rather than write letters complaining of poor service or lack of coöperation which could be minimized by going directly to the agent who has the matter in charge.¹

Another testimonial of the value of the traffic manager to his business is expressed by Stanford Shivers, Traffic Manager of Loveman, Joseph and Loeb, of Birmingham, Alabama, in a letter to the Secretary of the Traffic Group

¹ *Traffic World*, Vol. 34, No. 20, p. 1070.

of the National Retail Dry Goods Association, in which he urges the necessity that every shipper, especially the retail shipper who ships in quantity, have a traffic department supervised by a competent traffic manager. Mr. Shivers said in part:

Look upon the carrier as the main aisle of your store, so far as out-of-town customers are concerned. Hire a traffic man who will exert every effort to tender his shipments to the carriers in a way that will safeguard all concerned. If this is done the carriers—and you—will be able to satisfy your customers. The traffic manager will help you, your customer and the railroad. And any help to the railroads is a help to the public.²

The New Attitude of the Carriers toward Industrial and Commercial Traffic Managers

In the November 17, 1923, issue of the *Traffic World*, there appeared an advertisement of one of the largest rail carriers of the United States, which is significant as a tangible bit of evidence of the new spirit of mutual helpfulness that pervades the field of traffic management to-day. This advertisement hailed industrial and commercial traffic managers as comrades in the traffic army, workers in a common cause. It stressed the fact that industrial and railroad traffic men need no longer regard themselves as contenders in opposing camps but as coöperators for the common weal, collaborators in a public field of endeavor, students grappling with mutual problems, smoothing the way for commerce and industry. Through the efforts of these men, friction between shippers and carriers is minimized and efficiency and mutual understanding are promoted. As a result, the prosperity, peace, and happiness of the nation is fostered.

This carrier expressed its approval of the policy of industrial and commercial concerns intrusting their traffic

² *Ibid.*, Vol. 30, No. 17, p. 760.

affairs to expert hands and of the better recognition of this highly specialized department. The growing appreciation on the part of industrial and commercial executives of the technical knowledge, judgment, and diplomatic ability required in these traffic positions is attracting to this field, in constantly increasing numbers, a class of men whose devotion, talents, initiative, and vision qualify them as important factors in the solution of traffic problems and in the relations between the railroads and the railroad patrons. Traffic problems are national problems, and to the helpful influence of industrial and commercial traffic men may be attributed the reduction in friction and increase in understanding, happily evident on every hand.

You are of us. We are of you. Your problems are our problems. Our difficulties, trials, hopes and objectives run along parallel lines and we rise or fall together in mutual prosperity or adversity. There may be differences of opinion, but there will be mutual confidence; there may be different aspects of the same problem from different viewpoints, but there will be tolerance and friendship and mutual respect; there may be questions as to facts, but not as to sincerity of purpose; there may be exceptions to all generalizations, but they will only prove the rule, and that rule the Golden Rule.*

Evidences of the mutual regard of industrial traffic men for the traffic officials of the carriers are to be seen elsewhere. The traffic clubs, the Shippers' Regional Advisory Boards, and other organizations are concrete evidence of the new spirit of coöperation. The press, business, the carriers, and the government realize that, as perhaps never before, the situation in transportation calls for all to "put their shoulders to the wheel" and to give their best efforts, for the ultimate goal of all parties in interest is the same—good transportation services at fair prices.

* *Ibid.*, Vol. 32, No. 16, p. 747. See also Vol. 34, Nos. 4, 12, 16, editorials by H. A. Palmer.

This study of the organization and management of industrial and commercial traffic departments proceeds upon the assumption that the interests of shippers, the carriers, and the public are identical. The forms of organization set up by a number of representative industrial and commercial establishments have been examined and the results of the examination are set forth as examples of organization that are well equipped to obtain adequate transportation service at reasonable prices.

CHAPTER II

THE SCOPE AND FUNCTIONS OF INDUSTRIAL AND COMMERCIAL TRAFFIC DEPARTMENTS

Definition of the Term Industrial or Commercial Traffic Manager

An industrial or commercial traffic manager may be broadly defined as a transportation man who is charged with the responsibility of obtaining efficient and economical transportation service between the areas of production, manufacture, distribution, and consumption, in which the industry that employs him does business. Primarily, such men and the departments they manage are concerned with protecting the interests of their respective employers, but, in a broader sense, their efforts result in obtaining adequate transportation service at fair rates for all users of transportation facilities. This broader field of service, usually accomplished through coöperative action with the traffic managers and departments of other industries, commercial concerns, trade associations, and business bodies, ultimately redounds to the benefit of each industry and commercial enterprise through the establishment of fair rates and efficient service that are available to all on an equal basis. Transportation costs are important items in the prices of raw materials as well as in the prices of finished products, and good service is necessary to all users of transportation if goods are to be produced and distributed efficiently throughout the country.¹

¹ S. G. Casad, Traffic Manager, Standard Oil Company of California, "Industrial Traffic Management," *Commercial*, December, 1924, p. 8.

The position of the industrial and commercial traffic manager of the new school grew out of the needs of industrial and commercial establishments for men who were technically prepared to further their interests in the administration of their transportation problems. The users of transportation facilities need men with broad knowledge of rates, classification, shipping procedure, routes, services, and the legal rights of shippers and carriers. The growing complexity of transportation problems and the increasing degree of coöperation between carriers make it imperative that the interests of industry be represented by men thoroughly equipped to present the industrial and commercial side in the solution of these problems to the advantage of all concerned.

The cost of distributing raw materials and finished products is one of growing importance to American producers and consumers in these days of strenuous commercial competition. Commodities used in industry and useful to support life and comfort must be transported from areas of plenty to places of scarcity in order that an equilibrium may be established between the supply of goods and the demand for them in the markets of the country. Traffic management, in so far as it is related to industrial and commercial activity, concerns itself with this problem of distribution.

For the past seventy-five years the most important media of transportation in the United States have been the railroads. Early in the history of the United States these iron highways supplanted the canals, the turnpikes, and the rivers as the principal arteries for the transportation of passengers and goods. Most of the technique of industrial and commercial traffic management, consequently, has been developed in connection with railroad transportation. Steamship lines and inland water carriers, in so far as they form parts of through transportation routes in domestic

commerce, are closely affiliated with the rail carriers, and the work of the traffic manager is much the same in connection with such carriers as with railroads. The recent rise of the motor truck as an important factor in modern transportation merits consideration, not only as a subsidiary service to the older forms of inland transportation but also as a competitor. This new instrumentality of transportation requires that traffic managers give attention to it.³

The industrial or commercial traffic manager must be familiar with all the forms of transportation service that are available, in order that he may secure the most advantageous form of transportation at the most favorable rates.

Types of Traffic Managers

The term industrial establishment is used in its broadest sense so as to include all organizations engaged in commercial and industrial occupations that use transportation by rail, water, or highway. Such a comprehensive term includes, among others, manufacturing plants, wholesale distributors, jobbers, brokers, merchants, trade associations, and chambers of commerce.

There are certain variations in the duties of traffic managers and traffic departments that are peculiar to the line of business that the establishment is engaged in, but the general term industrial or commercial traffic department is frequently used to include all these varying types of traffic organizations in all sorts of commercial and industrial enterprises.

A distinction may be drawn, however, between industrial and commercial traffic managers. This distinction is not always clearly made in speaking of traffic managers to-day, as all men engaged in traffic work as shippers' representatives are often indiscriminately called industrial

³ See Report of Special Committee IV, U. S. Chamber of Commerce, Washington, November 2, 1923, pp. 8-9.

traffic managers, and their departments, industrial traffic departments. More precisely, however, industrial traffic managers are those representing industrial plants only. Their functions include the superintendence of shipping, the receiving of inbound freight at the factories, and the supervision, in many instances, of plant switching facilities and local motor transportation. Commercial traffic managers include all those attending to the transportation affairs of commercial concerns rather than of industrial establishments. This classification includes community traffic managers, commissioners of transportation of commercial organizations such as chambers of commerce, boards of trade, and commercial exchanges, as well as the managers of transportation and traffic bureaus that handle the affairs for groups of industries or commercial houses. In many respects the work of these two general classes of traffic managers is similar, but there is sufficient difference in their functions and in the organization of their departments to warrant a distinction being drawn between them. The training each group must have is much the same and the details of their duties and the technical procedure peculiar to each will be discussed later under appropriate headings.

The traffic manager of the industrial concern or commercial organization is the transportation purchasing officer whose function it is to see that the prices (the rates) and the quality (the service) of the commodity bought (transportation), that is offered for sale by the sellers (the carriers), are equal to the exacting requirements of the industry, commercial organization, or community.³

There is no one type of organization of the industrial or commercial traffic department which can be called *the* method. Each case must be considered on its own merits. The principal factors that influence the form of organiza-

³ G. Lloyd Wilson, "Industrial Traffic Departments," *Traffic World*, Vol. 34, No. 21, pp. 1136-1137.

tion that is employed are the character of the goods dealt in and the volume and nature of the tonnage to be handled. Influenced by these two broad factors, an industrial or commercial traffic department may range from a single shipping clerk to the large, highly organized departments that are to be found in the leading industries and commercial establishments of the country.

Effect of Federal Legislation upon the Scope and Importance of Traffic and Transportation Work

The first Federal railroad regulatory statute was enacted in 1887, when Congress passed the original Act to Regulate Commerce. Important amendments to this statute were enacted every few years from 1889 to 1920. The result of this mass of legislation has been the development of a semi-legal background to traffic and transportation work which has increased the complexity of the procedure and has accentuated the need for technical training on the part of the men attending to the transportation affairs of industries and commercial concerns.⁴

In 1906, the Hepburn Amendment to the Act to Regulate Commerce was passed by Congress, forbidding deviation from the freight rates that were published in tariffs lawfully filed with the Interstate Commerce Commission and providing fines and imprisonment penalties for the recipients as well as for the givers of rebates.⁵ The Carmack Amendment required the carriers to issue through bills of lading and established the liability of the road issuing such bills of lading to the holders for loss or damage, whether such loss was caused by the issuing road or its connections.⁶ The Mann-Elkins Act of 1910 again extended the scope of Federal control over common carriers and extended the Interstate Commerce Commission's

⁴ See 24 Statutes at Large 379.

⁵ See 34 Statutes at Large 584.

⁶ See 34 Statutes at Large 838.

powers over rates by granting it the authority to suspend proposed rates, pending investigations as to their reasonableness. Shippers were given the right to select routes beyond the initial road and carriers were required to quote rates in writing upon written request.⁷

Questions of carriers' release from liability were clarified in 1915 and 1916 by the Cummins Amendments, and car service and commission procedure were changed radically by the Esch Act of 1917.⁸ The Bills of Lading Act of 1916, the Panama Canal Act of 1912, the Valuation Act of 1913, and a number of other Federal statutes dealing with special phases of the transportation business have made industrial and commercial traffic management a highly specialized vocation, requiring a background of general business information as well as thorough technical training in transportation economics.

The Transportation Act of 1920 has radically changed certain features of rate and service work, and the relative rights and duties of the carriers, the shippers, and the government have been so readjusted that traffic management is made even more complex and the field of service broadened.⁹

The Duties of the Industrial and Commercial Traffic Managers

Lyman Anson, in an article in *Printers' Ink*, states the view of the layman with regard to the work of the traffic manager in industry and commerce:

I had a vague notion of the work of the traffic manager. I thought he was a glorified shipping clerk, whose duty it was to route shipments. I was badly mistaken, however. To be sure, there are traffic managers whose duties do not rise very high in

⁷ See 36 Statutes at Large 539.

⁸ See 38 Statutes at Large 1196; 39 Statutes at Large 441; 39 Statutes at Large 538; 40 Statutes at Large 270.

⁹ See 41 Statutes at Large 456.

importance, but the men who bear the titles of traffic managers in some of our larger corporations have positions that carry authority and responsibility in almost every division of the business.³⁰

The importance of traffic work is recognized by the executive heads of large industrial enterprises, and smaller organizations are following the lead of their larger rivals. Many new traffic departments are organized each year and existing departments enlarged and strengthened.

With the privileges granted to shippers and consignees by Federal and state legislation and the necessity of keeping industrial operating costs down to the minimum because of the pressure of competition, the traffic manager has become an indispensable part of the personnel of every industry. The information and training which he should possess are well stated by J. W. Cobey, formerly Traffic Manager of the National Cash Register Company.

The predominating qualification at all times is the mental equipment of the individual. An efficient traffic manager is the product of intensified training or technical education, and his education is really never completed, as he must continually study and analyze the new problems that are continually arriving.³¹

The traffic man must have an intimate knowledge of manufacturing costs, manufacturing processes, commercial geography, and trade customs throughout the world. He must be familiar, to some extent, with legal procedure, since many of the legal provisions regarding transportation of goods are becoming more and more perplexing to the shipping public, and the obligations of carriers and shippers are more and more stringently drawn, with substantial penalties for their nonobservance.

³⁰ Lyman Anson, "When the Traffic Manager Has a Voice in the Sales and Advertising Policies," *Printers' Ink*, Vol. 120, No. 7, p. 129.

³¹ J. W. Cobey, *The Traffic Field* (La Salle Press, Chicago, 1919), p. 32.

He must have an intimate knowledge of rates and tariff constructions, the application of freight schedules, and the principles underlying rate construction and classification procedure, since to a large extent these are his trade tools. Above all he must have ability to make a survey of the firm's output from a transportation standpoint, to discover existing discriminations and to eliminate them through the application of the principles of correct traffic procedure, reducing to a minimum the industry's transportation costs, both on inbound and outbound tonnage.

The traffic manager must be broad enough to meet with the manager and heads of other departments in his business and to take counsel with and advise them of transportation matters concerning the business. He must keep in close touch particularly with the managers of the order department, the purchasing department, the sales department, the production department, and the stock department, informing them of adverse transportation conditions, such as slow movement, congestions, and other abnormal conditions.¹²

Service Functions of Traffic Departments

The manifold duties of traffic departments fall logically into three major groups. The first group of duties may be called, for want of a better term, the service duties of the department.

Obtaining and Quoting Rates

Foremost among these duties is the work in connection with rates. A great deal of the attention of those concerned in the supervision of industrial traffic work is directed toward rail, water, express, and highway transportation charges. Rates must be obtained from the carriers and used for the quotation of rate information to other depart-

¹² *Ibid.*, p. 34. See also *Trade and Transportation Bulletin*, Chicago, December, 1923, Vol. 10, No. 12, p. 11.

ments of the establishment which are interested in purchasing materials or distributing the finished products.

Supervision of Tariff Files

Closely allied with the rate work of the department is the collection and maintenance of a file of tariffs sufficient to serve the needs of the industry. Well organized industrial and commercial traffic departments are equipped with a collection of freight rate tariffs, published by the transportation companies, including freight classifications, billing books, territorial directories, circulars, as well as the tariffs and supplements. From these official sources of information, the rate quotations required by the department are drawn whenever possible. Requests for rate quotations are made of the carriers only when necessary to verify the information contained in the tariffs or when the tariffs containing desired rates are not at hand.

Many well developed traffic departments not only maintain complete files of tariffs that publish rates used by the industry, but also keep a file of tariffs governing the movements of traffic of competitors, so that the rate advantage or disadvantage may be taken into account in quoting prices on competitive business. Tariffs are not only used as sources of information as to present rates but as authorities to support claims for refund of overcharges that arise after the tariffs have been superseded by others. Canceled issues are, therefore, kept by many carefully managed departments until the possibility of their being needed has been eliminated by the passage of the time within which overcharge or undercharge claims might be collected from the carriers.

Tariff studies are made by many progressive departments in order that prospective changes in rates or services may be anticipated and their effect upon the business of the establishment determined in advance. New rates which

tend to prejudice the industry unfairly may be protested in advance of the effective date of the tariffs containing the rates, and the Interstate Commerce Commission may be appealed to, so that the tariffs may be suspended pending investigations as to the reasonableness of the proposed rates. The interests of the company are thus fully protected.

Freight Bill Auditing

Freight bill auditing is another service function closely akin to the general rate work of the department. The Transportation Act of 1920 provides that freight is not to be delivered by the carrier at the destination until all tariff rates and charges have been paid, except under rules prescribed by the Interstate Commerce Commission, to insure prompt payment of charges by consignees and to prevent unjust discrimination by the carriers among consignees.¹³ The usual practice of the carriers is to consider forty-eight hours as cash payment, provided the consignees are on the carriers' approved credit lists. The charges must otherwise be paid in advance of delivery. Freight bills must, therefore, be audited quickly if corrections are to be made before payment by firms on the approved credit list. A careful check is made of the rate assessed, the class rating, the weight, and the extensions; and if errors are discovered, the delivering carrier's agent is requested to make revisions before the bills are paid. If the errors cannot be rectified until after payments are made, overcharge claims must be filed.

The railroad freight charges paid by American industries exceed \$4,500,000,000 annually.¹⁴ This huge figure does not include the vast sum paid the smaller railroad companies, the water lines, the express companies, or the motor car-

¹³ Act to Regulate Commerce, as amended, Sec. 3, par. 2, 41 Statutes at Large 479.

¹⁴ "Statistics of Railways of Class 1," Bureau of Railway Economics, Washington, October, 1924.

riers. Out of this tremendous amount of money, large sums are reclaimed annually by well managed traffic departments which make careful audits of their freight bills. The statements presented by the carriers are transmitted to the treasurer or other officer of the company for payment if they are correct; if they are found to be in error they are returned to the agent of the carrier for revision.

Preparing Claims for Loss and Damage

The preparation of claims for loss of or damage to goods while in the possession of the carrier, as well as claims for overcharges, is another important part of the service performed by industrial departments. About 1 per cent of the annual freight bill of \$5,000,000,000 is collected from the carriers as claims for loss and damage every year by industrial traffic managers. In 1923, the sum collected exceeded \$50,000,000.¹⁵ Well managed traffic departments save millions of dollars annually by collecting legitimate claims against the carriers and a greater sum perhaps by the elimination of causes of claims through careful shipping and billing.

Routing

Routing is another service or routine function of the traffic department. The selection of the type of service, whether rail, rail-and-water, all-water, express, or highway, is obviously an important duty. Just as important, however, is the selection of the complete route over which the goods are to travel. Since the passage of the Mann-Elkins Act of 1910, the shipper has had the right to choose the intermediate as well as the delivering carrier when a joint route is available. The proper selection of routes makes possible large savings in freight charges, quicker delivery, the elimination of extra handling at transfers, the avoid-

¹⁵ Freight Claim Prevention Committee, Report, 1923, American Railway Association, p. 17.

ance of congested terminals, the elimination or reduction of cartage charges, the reduction in the risks of damage, the utilization of special transit privileges, available over one route but not over others, and more convenient delivery for consignee. Routing is a traffic function of great importance and a right which is zealously guarded and carefully exercised by well managed traffic departments. Routing charts, showing the complete preferred routes to all common destinations, are prepared, in many instances, to guide the men doing the actual work of shipping. Other departments show the route to be used on the packing lists that are sent to the shipping floor before the goods are packed for shipment. The complete routes selected are often indicated on the bills of lading that are tendered to the carriers, in either instance.

Tracing Shipments

Goods that do not arrive at destination within a reasonable time are traced by wire, telephone call, letter, or personal visit to the proper office of the carrier, in order that location of the delayed goods may be learned and the goods, if found, hurried forward to destination. The contract of carriage contained in the bill of lading does not favor the careless traffic manager, for it provides that claims for loss must be filed within six months after a reasonable time for delivery has elapsed.¹⁶ The time limit is extended to nine months in case the freight is for export. Reasonable diligence, therefore, is necessary in tracing overdue shipments, if the owner of the goods is to be protected.

Expediting Shipments

Another important duty of the traffic department is that of expediting shipments that are urgently needed by the industry. Arrangements are made with carriers to hurry

¹⁶ Uniform Domestic Bill of Lading, Sec. 2, par. 8.

forward urgently needed shipments so that a shutdown of the plant may be avoided, an important contract filled on the specified date, or a rush order completed on schedule. The traffic departments of many industrial concerns are called upon constantly to perform feats of legerdemain which would be impossible without a comprehensive knowledge of how to go about speeding up the wheels of transportation. Industrial traffic departments must convince the railroad operating officials of the desperate urgency of the shipments so as to secure "preference" movements and special handling of the needed goods in the terminals.

Arranging for Car Supply

Car supply is another important function of traffic departments. Orders for empty cars of the size and kind required for outbound shipments must be placed with the agents of carriers. The kind and size of the car depend upon the character and amount of goods to be shipped and the rules of the governing classification. The ordering of any size car or a car of a larger size than required may result in the payment of extra transportation charges. Ordering cars is a technical matter requiring traffic training.¹⁷

Records are kept, in all well ordered traffic departments, of the exact time of placement of empty cars for loading and of loaded cars for unloading as well as of the time the empty cars are released by notices sent to the carrier and loaded cars are turned over to be forwarded by the carrier. Such records must be absolutely accurate, for upon them depends the ability of the traffic department to check the bills for car demurrage presented by the carrier. Many departments use the car records to determine the extent and causes of car detention which results in demurrage, so that the loss may be reduced or eliminated.

¹⁷ Consolidated Freight Classification No. 4, Rule 34.

Packing Freight

The packing and marking of goods for shipment is a vital phase of the department's service work. The railroads accept at standard rates only such goods as are packed in accordance with the rules of the freight classification. Proper packing, therefore, is a matter for expert rather than "hit or miss" methods. Packing directions are prepared in many well managed departments, specifying the type of container, the size of the container in relation to the amount of goods, the methods of sealing or strapping to be used, the marking, and the kinds of goods to be combined with others to make up a full shipment. Classification rules provide that mixtures of goods in one container are to be rated at the rate applicable to the highest rated article in the mixture and at the combined weight of the entire mixture.¹⁸ Ignorance or carelessness in shipping may therefore make serious inroads upon the profits of an industry if the company's shipping is not supervised by a competent traffic man.

Receiving Freight

Similar packing specifications are drawn up, in many organizations, for the guidance of the receiving room force. The required packing standards are designated and the receiver in charge of the inbound-freight floor is charged with the responsibility of reporting exceptions. The suppliers making shipments to the industry who do not comply with the packing requirements, are called upon to correct the practice, and, if it is deemed advisable, orders are canceled and placed elsewhere in the event of their neglecting or refusing to accede to the requests.

Preparation of Shipping Papers

The preparation of the necessary shipping papers is another important service function of the traffic department.

¹⁸ *Ibid.*, Rule 10.

The modern practice of the filling out of the bill of lading contract by the shipper is widespread among the better organized traffic departments. The complete document, with necessary copies, is drawn up and the full shipping information, including the complete route, is supplied the carriers. Many large shippers have their own bills of lading with the name of the shipper printed and a place left blank for the insertion of the name of the originating carrier. The name and address of shipper, consignee or party to be notified, the route, the complete description of the goods in the terminology used in the classification or in the commodity tariff governing the shipment, the quantity, marks, valuation, amounts prepaid, if any, and other information are carefully and painstakingly included in the bill of lading. Loss and delay are often avoided by these precautions.

Supervision of Local Transportation

The supervision of local transportation to and from railroad depots, steamship piers, and the general short-distance hauling work performed by the industry's own teams or trucks or those of hauling contractors engaged to do the work is often intrusted to the industrial traffic manager. A number of industrial organizations have local transportation departments that are supervised directly by a motor transportation superintendent or other department head, subordinate to the traffic manager, while other concerns are organized so that the traffic manager has no control over the local transport work. The intimate connection between this work and the general traffic work, however, makes desirable in most instances a direct connection between the two branches of the work.¹⁹ Chauffeurs or truckmen are required to sign delivery receipts to the carriers

¹⁹ P. E. White, *Motor Transportation of Merchandise and Passengers* (McGraw-Hill, New York, 1923), Chap. xii.

for inbound less-than-carload shipments at the freight stations. A clear receipt for a damaged shipment, while not fatal to the chances of the consignee to collect damages, nevertheless makes collection much more difficult. The supervision of the traffic manager over the work and the careful training of the drivers receiving goods have proved advantageous in many instances. The consolidation of all transportation work under one responsible department manager ordinarily tends toward efficiency. Short-distance delivery service to customers and the hauling of goods to and from suppliers is also often advantageously placed under the jurisdiction of the traffic department, so that an opportunity is offered to compare trucking costs with rail, water, and express transportation rates in order to obtain the proper class of service at the most economical rates.

Supervision of Plant Transportation

Another routine service task of the traffic department is the supervision of the work of the plant transportation department. Many large industries have rail trackage within the plant together with locomotives and private freight cars to perform local service inside the plant limits. Some of the larger industrial establishments have elaborate networks of private tracks, built at the expense of the owners of the industries and operated with locomotives owned and crews employed by the plants. Nearly 7,000 miles of tracks are operated in the United States by proprietary switching and terminal railways, as well as many more miles of private industrial tracks.²⁰

The supervision of the plant system is sometimes vested in the traffic manager and, in other cases, in a superintendent of plant transportation. In still other industries, the actual operation of the intraplant facilities is performed

²⁰ "Statistics of Railways of Class I," Bureau of Railway Economics, Washington, October, 1924.

under the supervision of a transportation superintendent, who reports to the traffic manager.

The advantages of consolidating the work with the other duties of the traffic department lie in the concentration of all matters pertaining to transportation under the direction of one responsible department head. Car orders, car releases, demurrage bills, car records, local shifts from place to place within the plant, and interchange movements between the plant's tracks and the tracks of the carrier are best accomplished when performed by one department. The advocates of the plan of unifying the traffic work under the supervision of one general traffic head claim that transportation work is done more efficiently in this way than when the work is divided among several independent department heads. The work of intraplant switching in the Illinois Steel Company, for example, is performed under the supervision of the traffic divisions of that company. From 5,000 to 6,000 cars are moved daily without lost time or movement due to improper selection of equipment or misrouting and without interference with the regular flow of inbound and outbound traffic interchanged with the railroad lines serving the plant. The traffic manager is aided in the work of supervision by a group of plant men, superintendents, and foremen, known as the Efficiency Committee. This committee handles all questions of local transportation and makes it possible for those concerned with the management of the traffic of the company to get a clear picture of the transportation situation within the plant. Meetings are held weekly or oftener in cases of emergency.

An important phase of the work of management of transportation within the plant is the routing of traffic so as to eliminate cross movements. As nearly as possible, goods in the process of manufacture and assemblage are handled from shop to shop within the plant in one direction. The raw materials are brought into the plant or factory at one

point and moved gradually, as manufacturing progresses, toward the place at the opposite extremity from which the finished products are turned over to the outside transportation lines for movement to market. The elimination of cross currents of traffic within the plant tends to increase the speed and economy of manufacturing, and eliminate the congestion within the plant which makes transportation slow and costly.

Constructive Functions

Constructive functions of the traffic department are those in which the department works, not as a service organization performing more or less routine functions, but as a research bureau intent upon discovering new transportation economics or further means of reducing the operating and distribution expenses of the industry.

Selection of Warehouses

One such function is the selection of warehouse sites from which goods may be distributed economically. A manufacturer of paper may ship the entire output in less-than-carload lots directly from the manufacturing plant to customers at widely scattered points throughout the United States. Warehouses, located strategically from a transportation rate and service standpoint, may be carefully selected so that carloads of the goods may be shipped to such points and arrangements made to have the contents unloaded, stored, and redistributed in less-than-carload lots to individual consignees throughout the territory. One large publishing house saves hundreds of thousands of dollars annually by shipping its periodicals by freight in carload lots to warehouses at carefully selected points throughout the country, from which the magazines are distributed in smaller lots by mail within the postal zone in which the warehouses are located.

Consolidating Small Lots into Carloads

Inbound less-than-carload shipments may be consolidated at warehouses in the same way and forwarded to destination in carload lots. Several prominent Southwestern department stores have such arrangements for the consolidation of less-than-carload shipments from various Atlantic seaboard points at New York City and other North Atlantic ports. Here the goods are accumulated until sufficient tonnage for solid cars is received, and from these points the goods are forwarded in carload lots to destination. The saving lies in the difference between the through less-than-carload rates and the local less-than-carload rates to the ports, plus the carload rate from the ports to destination and any handling expenses in effecting the consolidation. This difference, in the case of many large consignees of less-than-carload freight, amounts to many thousands of dollars in freight charges.

Selection of Plant Sites

The selection of plant locations is another constructive function of the traffic manager. The traffic manager's staff may, by analyzing the transportation facilities afforded at a given location and by reviewing the rate structures from the sources of supply and to the prospective markets, give expert advice as to locations, which may prevent grave errors in selecting sites or make possible large annual savings in freight charges and reduced operating costs.

A newspaper plant in Philadelphia, Pennsylvania, is built over the tracks of one of the rail carriers serving that city. White paper for the presses may be lifted directly from the freight cars on the siding within the plant to the storage room. A saving of \$85,000 yearly is made possible by this location. This sum is saved in the cartage from the freight station to the plant of the white paper and does not take into consideration similar savings made possible

in handling other supplies. The city of Gary, Indiana, was selected by the officials of the U. S. Steel Corporation as an ideal site for steel plants because of adequate rail-and-water transportation facilities and the favorable rate situation in that district. The plants were built in the location suggested and the town surrounding the plants was developed from this nucleus into one of the greatest steel-producing centers of the country.

Rate Research

Another form of constructive work, performed in many well organized traffic departments, has to do with rates. Rates applicable via various routes and the different media of transportation, including railroads, water carriers, express companies, and highway transportation lines, are analyzed by expert rate men to discover the most economical methods of shipment. The work is carried beyond this point in many departments. Existing rate structures are analyzed and compared with past levels, or with rates paid for similar service in other sections of the country, or between points of origin and destination in the same district. Unfavorable adjustments, if they are discovered, are called to the attention of the carriers so that steps may be taken to have the maladjustments remedied. Rate charts, tables, graphs, and other exhibits are often prepared to present the cases more effectively.

Preparation of Cases before Commissions and Courts

Nearly all large industrial traffic departments are concerned, from time to time, with the preparation and presentation of cases before state and Federal regulatory commissions. The state commissions are appealed to in order that unjust discriminations against the industry in intrastate commerce may be removed, and appeals are made to the Interstate Commerce Commission if the conditions complained of affect the industry's interstate traffic. The

material for use in complaints is prepared by the traffic department, and rate exhibits and other documentary evidence required in the presentation of such cases are drawn up. Members of the traffic department are frequently called upon to testify as witnesses and sometimes the entire presentation of the complaint, including the pleading of the case, is handled by the traffic department. In other instances the pleading is attended to by the legal department, while the preparation of the case is done by the traffic department staff.

The preparation and presentation of cases before the commissions constitute important phases of the work of the industrial traffic managers of many large concerns. Often, cases involving a number of industries in the same line of business or in the same section of the country are prosecuted jointly.

Coöperative Functions of Traffic Departments

The third group of duties of traffic departments may be called, for lack of a better term, the "coöperative" duties. This class of functions includes the activities of the traffic department that are undertaken in coöperation with other departments of the concern. When traffic managers function as members of the industrial teams working with other department heads, the most important results are achieved.

Coöperation with the Sales Department

Foremost among the coöperative duties is the work of the traffic department in collaboration with the sales department. The traffic manager is able to give expert advice as to the sections of the country in which the efforts of the sales department are most apt to bear the best fruit. The rate adjustments from the factory to the proposed markets are analyzed in many traffic departments and compared with the relative adjustments applying from the competitors' factories. From the results obtained, the sales de-

partment may be thoroughly informed as to the markets in which the industry enjoys advantages in freight rates and as to the territories in which it suffers disadvantages. The sales efforts may then be focused in the most fertile fields.

The traffic department can coöperate further with the sales department by arranging itineraries for the company's salesmen, by reserving hotel and transportation accommodations, and by furnishing rate data for use of salesmen. Price lists, including all freight, may thus be quoted to prospective customers. The sales department is advised of changes in rate structures in certain territories, which may make such districts favorable markets as far as rate advantage is concerned, and of sections in which unfavorable rate changes have been made. The traffic department may coöperate with the sales department in planning intensive sales campaigns in the former cases, so that the greatest sales activity may be concentrated in the most favorable markets.

Differential-rail, rail-and-water, or all-water routes may be selected and the lower rates applying over such lines taken advantage of, in case of rate disadvantage via standard all-rail routes. The sales department, wishing to quote on competitive business, frequently inquires of the traffic department the rates applying from the plant and from the plants of probable competitors to the proposed destinations. If the industry is at a rate disadvantage via standard all-rail routes, the traffic department may discover a differential route which would, because of the lower rate, alter the situation so as to convert a rate disadvantage into an advantage or at least neutralize the disadvantage so as to put the industry on a par with its competitors.

The traffic department often materially assists the sales department in building up good will for the company by service to customers. In some cases the reputation for

service is of such a character that business is obtained consistently by the concern on a service rather than a price basis. The progress of the customers' orders is reported to the customers, shipping dates are announced in advance, advices of forwarding from the plant are given promptly, freight charges are reduced to minimum by correct packing and careful selection of routes, and customers are informed exactly what the freight charges should be. If overcharges or damages occur, the traffic departments of many concerns offer whatever coöperation may be necessary to adjust matters for the benefit of the customers. A feeling of good will is thus built up, which constitutes one of the valuable assets of the company.

Coöperation with the Advertising Department

The traffic department can coöperate with the advertising department in working out the publicity problems of the company. The connection between the work of these two departments may seem rather remote at first glance, but closer examination reveals an important field of coöperation. The advertising department is charged with the responsibility of spending the advertising appropriation to best advantage. The traffic department can advise the advertising department as to the territories in which the industry enjoys a rate advantage or at least is not at a disadvantage as compared with its competitors. The advertising campaigns may be focused in these territories and the money expended where it is most apt to produce results. The traffic, sales, and advertising managers of the William Wrigley, Jr., Company, the nationally known chewing-gum manufacturing company, constitute an informal board of sales strategy which functions so as to give the company the benefit of each man's specialized knowledge. The company is saved the expense of wasted advertising in sections of the country or of the world where the

transportation rate or service situation precludes any chance of successfully doing business.

Coöperation with the Purchasing Department

Another coöperative function of the traffic department is the assistance it renders the purchasing department. The purchasing agent may have been purchasing raw materials or supplies advantageously from one locality or firm for a number of years. New conditions may arise—a change may be made in rates or a new route may become available—which open up an entirely new territory as a source of supply or make the old source unavailable. The traffic department is able, in such cases, to advise the purchasing department of the nature and effect of the changes so that arrangements may be made to take advantage of the altered situation. In many cases the change may be learned of before it becomes operative, so that no loss is suffered or comparative advantage overlooked for even a short period of time.

Not only can the traffic manager coöperate with the purchasing department in purchasing supplies at the lowest prices, but also in regulating the flow of inbound traffic so as to keep the wheels of the industry turning at the desired rate of speed. Orders placed for considerable quantities of goods are followed up by the traffic department so that shipments may be ordered forwarded when and in the manner desired. Fluctuations in the rate of supply are thus avoided. Stocks of goods can be hurried forward if congestion of the railroads is threatened or shipments may be deferred if sufficient stocks of goods are on hand at the plant.

The traffic department of Wilson and Company, Chicago packers, coöperates with the purchasing department in this manner so as to secure economy and efficiency in handling the tremendous inbound business of the concern.

Lyman Anson in the article in *Printers' Ink* previously referred to, thus sums up the services of the traffic manager in connection with inflowing business:

In general, the traffic manager's division, when it functions efficiently, helps the purchasing agent to buy at better advantage because it extends the area over which the latter can ask for bids. It increases competition, moreover, among those from whom the purchasing agent buys.²¹

Coöperation with the Production Department

The traffic manager may coöperate with the work of the production manager in keeping inflowing traffic adjusted to the speed of production and outflowing shipments on such a basis as to prevent an overaccumulation of finished products. Movements of traffic within plants are often routed so as to prevent fluctuations in the speed of production. Coöperation is necessary to synchronize the speeds of transportation and production, and each department sharing in the work contributes to the successful management of the plant.

J. W. Cobey, formerly Traffic Manager of the National Cash Register Company, has summarized as follows the services of the traffic department to production:

A continued survey of the output of the plant should be undertaken by the traffic department, having in view the standardization and condensation of the goods to be shipped, thus reducing the weight and bulk. These are two essential factors in the aggregate transportation expense paid by an industry, to say nothing of the added expense incurred by packing articles of unnecessarily large size.²²

Working with the Carriers

In addition to the opportunities for coöperation with other departments of the industry, with customers, and with

²¹ Lyman Anson, *op. cit.*, p. 130.

²² J. W. Cobey, *op. cit.*, p. 35.

suppliers, the traffic department of the industry coöperates with the traffic and operating departments of carriers serving the plant so as to make sure of efficient transportation service. Transportation lines form the connections between the suppliers, the industry, and its customers, and consideration of the welfare of the carriers is necessary to guarantee adequate transportation service. Reasonable service is demanded of the carriers by the managers of progressive traffic departments, but the fact is never lost sight of that the railroads, steamship companies, and motor lines are the silent partners in the industry's enterprise. Only legitimate claims are filed, reasonable service is insisted upon, and fair play is recognized as the code under which business is transacted. The mace and the battle-ax are weapons of the past; coöperation and consideration have been largely substituted for antagonism and antipathy.

One instance alone will suffice to prove the thesis that honesty is by far the best policy in traffic management as in all other phases of life. Incorrect freight bills, understating the charges, are sometimes presented by the carriers. The industrial traffic department has two alternatives before it. First, the bill may be paid on the incorrect basis and a chance taken that the error will be discovered and the correct amount collected at a later date. Second, the traffic manager may point out the error to the agent of the carrier and ask for a corrected bill for a higher amount. This practice is the only honest as well as the best practice from a business standpoint. If the incorrect bill is paid, the necessary accounting entries must be made and the paid bill filed for future reference. The Transportation Act of 1920 gives the carriers three years within which suits may be entered to recover undercharges.²³ Any time within this three-year period, the carrier may call upon the industry to pay the difference between the incorrectly assessed

²³ Transportation Act, 1920, Sec. 16, par. 3.

charges and the correct amount. The transaction may be forgotten when the new demand is made and the old records must be looked up and new accounting entries made when the mistake is rectified. The added expense makes the evasion as unprofitable as it is unethical. Other instances might be cited to show the value of coöperation between the shipper and the carriers; this one case illustrates the principle sufficiently for our present purposes.

Scope of the Traffic Department's Work

The service, constructive, and coöperative functions of traffic departments that have been discussed here indicate in a general way the duties and functions of the modern industrial traffic department. These functions, it will be noted, are often preventive in nature, which makes it difficult to measure the value of the service in many cases. It is an easy matter for the traffic department to point to the sum recovered annually in claims from the carriers for damages, losses, and overcharges, but a more difficult matter to estimate the amount of claims prevented by proper packing, marking, loading, and shipping. The amount saved by rate adjustments is easily calculated, but the sum earned by coöperative and constructive action is often difficult to determine. "Rectifying minor mistakes made unintentionally by railroads in such routine matters as billing, demurrage and so on may save some of our largest companies thousands of dollars a year—such mistakes will occur and mean permanent loss to the company unless they are run down relentlessly."²⁴ This, however, is not all there is to industrial traffic management. Industrial traffic departments, producing tangible profits for a company, may be given their proper share of credit, but the actual value of the services of the traffic department is often difficult to

²⁴ J. H. Beek, Executive Secretary of the National Industrial League, Annual Report, 1923.

appraise definitely. Suffice it to say that all large users of transportation service maintain traffic departments and smaller concerns are obliged to follow their example in order to secure adequate transportation at fair rates. Such service must be had in order to compete successfully with the larger rivals.

How small may a business be and still be justified in employing a high-grade traffic manager? [asks Lyman Anson.] It is difficult to answer this question because conditions are different.

The important fact is this:—today competition justifies a much smaller company employing a traffic manager of its own than was the case several years ago. This is a natural consequence of self defense. Classification, routing, rates, and so on, have become more complicated and instances have doubled in which the chance of a company's doing business depends upon how economically that company can get in its raw materials and distribute its finished products. This condition is by no means confined to the larger concerns. Where the little fellow has to "buck" against the big, it is frequently not so much a question of, "Can I afford a traffic manager of my own?" as "Can I afford not to have one?"²

² Lyman Anson, *op. cit.*, p. 141.

CHAPTER III

THE MANAGEMENT OF SHIPPING

The Importance of Proper Shipping

The shipping rooms in industrial establishments attend to the preparation of goods for shipment, and to the forwarding of such shipments via railroad, steamship, express, parcel post, or motor truck. In many industrial plants the shipping room is an independent department organization. In other concerns, however, the traffic department supervises the work of the shipping room, which is a bureau or subdepartment of the general traffic organization. Still other instances may be cited of shipping room organizations that are attached as subdepartments to other large departments, such, for example, as the stores or stock department, or the work or manufacturing departments. Such an arrangement cannot be regarded as typical, for the work of the shipping room is an integral part of the work of the typical industrial traffic department. If the shipping room is not a part of the traffic organization it is because there is some special reason, peculiar to the individual organization, which accounts for its alliance with any other department.

It is within the power of the shipping bureau either to earn or to lose a great deal of money for the industry. Careless, slipshod, and unintelligent packing and forwarding methods result in loss of time and money, while painstaking care in the same work results in appreciable savings of company funds. The tendency, especially among large

industrial establishments, is definitely toward the placing of the shipping room under the supervision of the traffic department. The traffic manager, in such cases, dictates the modes of packing and forwarding. He instructs the shipper in the methods to be used for packing, marking, and weighing. It is impracticable for the traffic manager to issue standard orders for the guidance of the shipping department if it is an independent department, not subject to his direction.

Duties of a Typical Shipping Room

The shipping foreman is usually responsible for the preparation of goods for shipment from the time the stock or manufacturing department turns the goods over to him until they are ready for delivery to the transportation companies. This list of duties is a comprehensive one, including:

1. Packing less-than-carload shipments into containers
2. Loading less-than-carload shipments into trap cars or aboard motor trucks for transportation to the railroad depots
3. Arranging for the placement of cars for outbound carload shipments, and trap cars for less-than-carload shipments
4. Preparation of shipping papers, including railroad bills of lading, express receipts, ocean and inland water bills of lading, motor receipts, packing lists, and similar documents
5. Loading, stowing, and bracing carload shipments
6. Marking less-than-carload as well as carload shipments
7. Weighing outbound shipments—carloads and less than carloads
8. Preparation of shipping records
9. Checking shipments against invoices and other papers
10. Arranging for calls for express shipments

This list of duties is not absolutely complete, for variations resulting in the addition of other important duties, or the elimination of several of this typical list, are to be found.

Factors Determining the Type of Organization

An examination of the various duties performed by typical industrial shipping departments serves to indicate that an efficient and well coördinated organization is needed to do the work well. The exact type of organization needed to handle the work with the greatest efficiency depends upon several factors:

1. *The size of the industry.* A manufacturing plant forwarding many carload and less-than-carload shipments, aggregating a large tonnage daily, obviously requires a larger and more thoroughly subdivided organization than is necessary to perform the work for a smaller industry.

2. *The nature of the tonnage.* An industry shipping a comparatively small number of heavy shipments of a single kind requires a different shipping-room organization than a factory that manufactures a variety of goods of varying weights, sizes, and kinds of commodities. In the former case the need runs toward an organization with a comparatively large number of platform laborers with fewer packers and clerical workers. In the latter instance the situation is reversed.

3. *The distribution of the tonnage between carload and less-than-carload lots.* A shipper forwarding freight in carload lots exclusively has a different problem from one who ships little or no carload business. The former is concerned with obtaining empty cars, packing and bracing the freight within the cars, and securing prompt switching movements for his loaded cars, while the latter must organize his force to pack the less-than-carload containers and arrange to have his shipments hauled to the local railroad or steamship depots, or switched to the freight depots in trap cars.

4. *The position of the shipping department in the business organization of the industry.* A shipping department

that functions as an independent unit must be organized along lines quite different from a department that is subordinate to the traffic department. As the head of a separate department, a greater burden of executive work is placed upon the head of the shipping department and a greater number of functions of a clerical and statistical nature must be performed by his organization. If the shipping room functions as a subdivision of the traffic department, the transportation work is coördinated under a responsible department manager, and a large share of the work of an executive and a statistical nature, pertaining to shipping, is performed by the traffic manager's staff.

For the purposes of a study of the shipping problems of industrial traffic departments, it is well to proceed with the assumption that all shipping departments function as subordinate bureaus to general traffic departments. This may be safely done, for the trend of modern industrial organization appears to be definitely in that direction. Independently constituted shipping departments that perform traffic as well as shipping operations are really little traffic departments, which have developed sufficiently to be classed as full-fledged traffic departments. Eventually these departmental organizations take over the constructive work of traffic management, as well as the routine work of shipping, and the shipping is performed by a subdivision of the general departmental organization

Typical Shipping Organizations

An examination of a few typical organizations serves to emphasize certain points of similarity, as well as to point out variations caused by one, or several, of the factors that have been discussed above.

1. *A Large Manufacturing Company*

The shipping room of the typical large manufacturing plant is in charge of a foreman, or shipper, who superin-

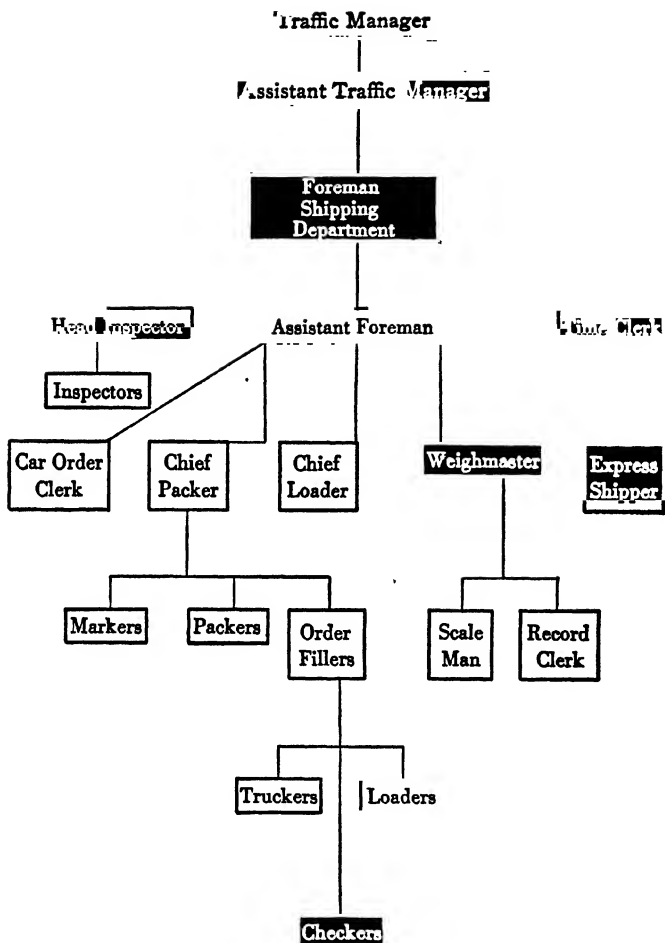


FIG. 1. TYPICAL SHIPPING ORGANIZATION OF A LARGE MANUFACTURING COMPANY

tends the work of a large staff of subordinates. A chief inspector, with a staff of inspectors, attends to the checking of the packing, marking, weighing, and loading of all carload and less-than-carload shipments, to see that the shipments forwarded correspond with the invoices, packing slips, bills of lading, and with the rules of classification governing shipments.

A time clerk attends to the recording of the working time of men who are paid at daily or hourly rates. An assistant foreman acts as the deputy and general assistant of the shipper.

A car order clerk arranges for the placing of empty cars for loading and for the execution of bills of lading with the traffic department.

A head packer supervises the packing and marking of shipments of less-than-carload freight and prepares the goods for loading.

A chief loader, or loading foreman, is responsible for the work of the truckmen, stevedores, and checkers who load, stow, and brace the shipments in the cars.

The weighmaster is in charge of all weighing and weight records, both of carloads and less-than-carload shipments.

An express shipper specializes in the preparation of goods for movement by express. The actual packing and marking is attended to by the men in the regular packing and marking gangs, but the special requirements of express packing and marking, as well as the execution of express shipping papers, are attended to by the express shipper.

A chart of this organization is shown in Figure 1.

This departmental organization is typical of the organizations found in the industrial plants that ship both carload and less-than-carload freight by rail and steamship, as well as by express. This organization performs all the work of packing, weighing, marking, loading, bracing, and check-

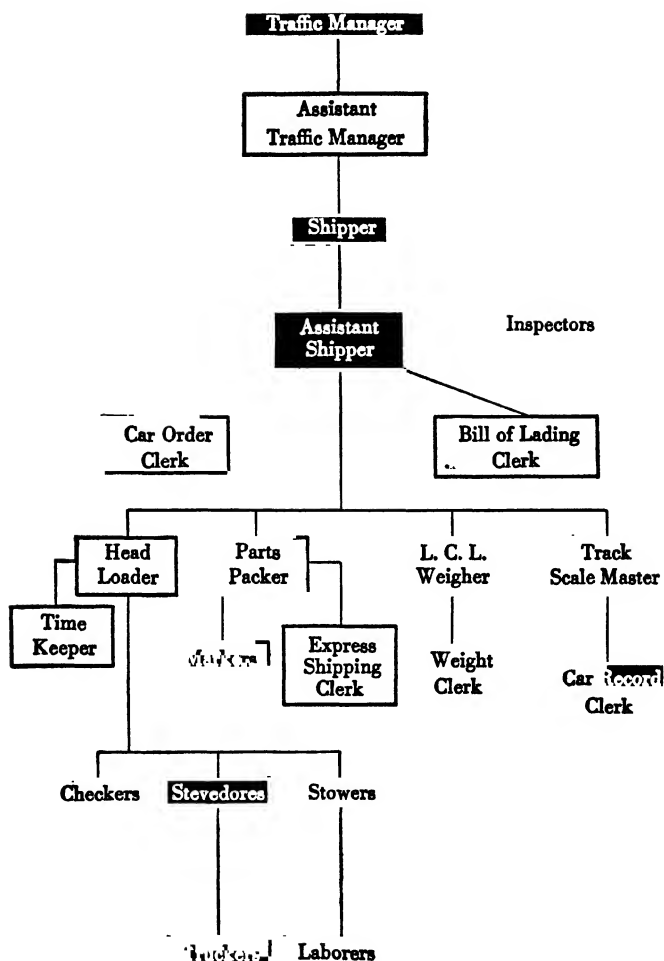


FIG. 2. SHIPPING ORGANIZATION OF AN AUTOMOBILE MANUFACTURER, HANDLING A LARGE PROPORTION OF CARLOAD TONNAGE

ing freight, subject to the supervision of the traffic manager. Orders for cars and arrangements for trucking shipments are made through the traffic department, which department also attends to all work in connection with the preparation and execution of shipping papers, and transmits them to the carriers' agents for completion.

2. *A Shipping Organization Handling a Large Amount of Carload Tonnage as Compared with Less-than-Carload*

The shipping department of an automobile-manufacturing plant is especially concerned with carload shipments. An organization is needed that is skilled in loading and stowing the machines aboard cars. Automobiles must be carefully loaded, stowed, and braced, to withstand the hazards of railroad transportation. The art of loading automobiles has advanced rapidly within the past few years. When the automobile industry was new and carload minimum weights were comparatively low, several motors were loaded in a freight car, and sufficiently braced to prevent them from rolling. Now, scientific packing has made it possible for several cars to be loaded where one was loaded before, lower rates have been granted, and the carload minima increased. Cars are semiknocked down and arranged so as to use a larger percentage of the capacity of the car. Such a department must have specialists in car loading, men who are thoroughly familiar with the loading requirements of the carriers and fully conversant with the dunnage requirements and allowances.

In shipping articles of standard weights, such as automobiles, many shippers enter into weight agreements with the carriers by the terms of which unit weights are agreed upon, and such weights, subject to check and correction by the carriers, are used in lieu of actual scale weights. This simplifies the work of both shippers and carriers.

3. *Shipping Organization of a Large Less-than-Carload Shipper*

A department of this kind specializes in packing and shipping less-than-carload shipments of many different kinds. A comparatively large number of packers and markers are required to handle the work efficiently. Constant supervision is exercised, so that the orders as packed and shipped may coincide with the instructions of the customer and the requirements of the carriers. Care is exercised to pack freight, parcel-post matter, and express shipments in accordance with the requirements of each class of service. To insure the best results, in this respect, the departmental organization sketched above has men in charge of each kind of shipping.

4. *Shipping Organization of a Shipper of Heavy Commodities*

The shipping organization of factories that manufacture and ship heavy commodities is typified by the steel mill organization chart shown in Figure 4. The shipping work is supervised by a foreman, or shipper, who is responsible for the work of the car clerk, loaders, inspectors, packers, and the weighmaster. The work of the loaders, packers, and weighers is checked by inspectors, so that shipments may correspond to the job requirements. Each shipment must be passed upon by these inspectors before it is released. The contents of every car and package are checked for size, kind, and quality, as well as for marks, before the bills of lading and the order sheets are approved. Those in charge of traffic departments of steel-manufacturing plants must be fully informed as to the loading requirements of the carriers, especially with those applying to the loading and bracing of heavy pieces. Many iron or steel structural members are of such great length that two or more cars are required to transport a single beam or girder.

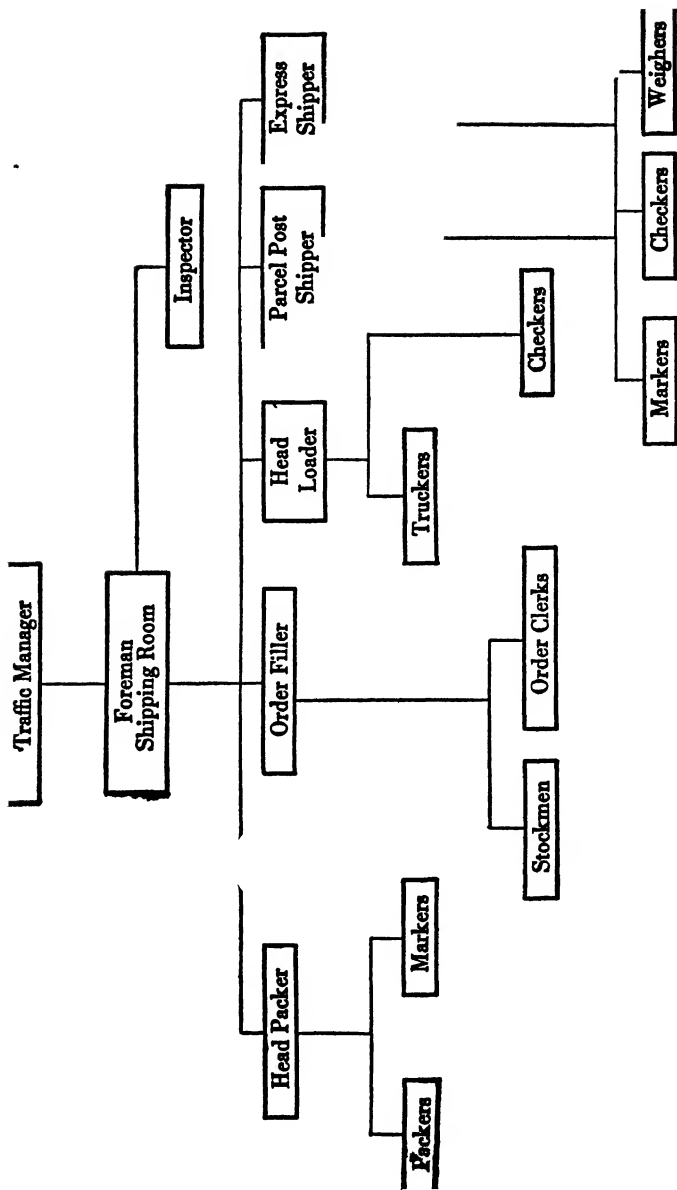


FIG. 3. TYPICAL SHIPPING ORGANIZATION FOR HANDLING LESS-THAN-CARLOAD SHIPMENTS

The clearance requirements of the carriers must be ascertained, so that pieces of unusual height, weight, or width, may be routed correctly to get them through tunnels, under bridges, and around curves. This is the work of the clearance clerk in the organization shown in Figure 4.

Packing Freight

Not many years ago the packing of freight for shipment was not given the serious consideration that it is to-day. Many looked upon it as a routine task of putting goods in containers sufficiently large to accommodate them and strong enough to stand the somewhat superficial inspection of the receiving clerks at the railroad stations. Old boxes and crates were often used without especially adapting the container to fit the goods to be transported. As a result, freight was often lost or pilfered from these inadequate containers, goods were damaged because of insufficient packing and the hands and clothing of freight handlers endangered by projecting nails and rough edges of dilapidated crates and cases. Railways, steamship lines, and express companies, as well as shippers, as individuals and through their respective trade associations, have been working upon the problems of good packing and adequate containers for some time past.

The U. S. Department of Commerce has been especially active in formulating suggestions and sample packing specifications, seeking to improve packing methods. The question of proper packing and shipping is at last receiving the attention of trained transportation minds and the results may be seen in the rapid strides forward in the art of good packing.

The Ideal in Packing

The goal to be striven toward in packing freight for shipment is the preparation of goods in such a manner that they will arrive at destination in good order and be carried

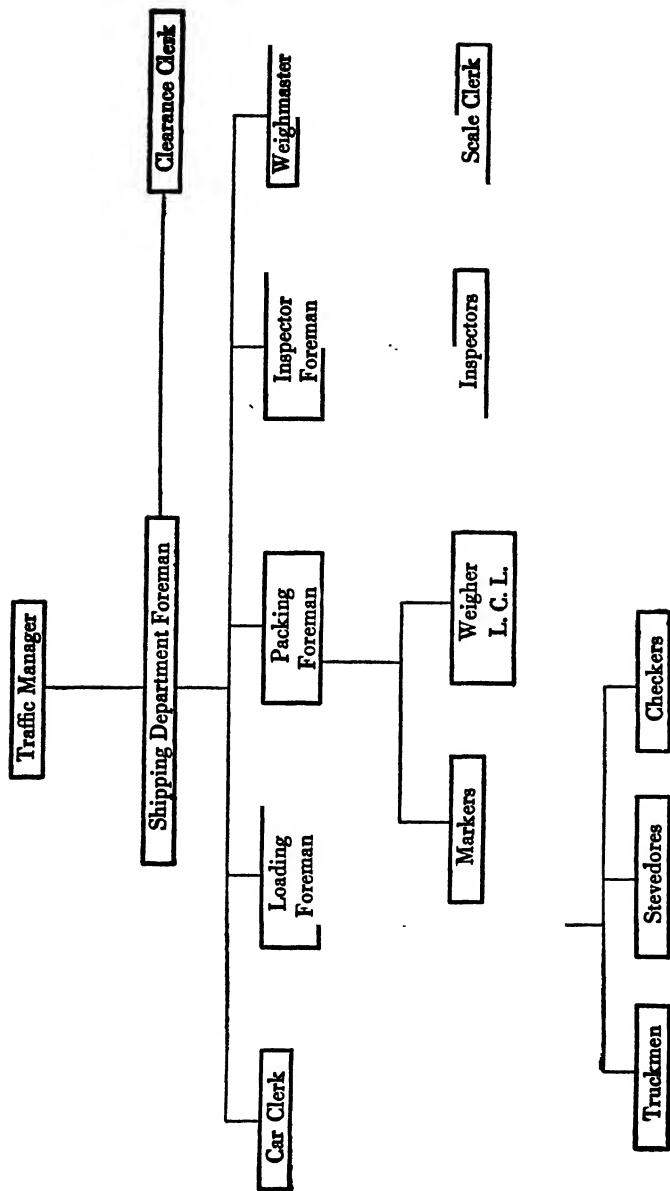


FIG. 4. SHIPPING ORGANIZATION OF A STEEL MANUFACTURER, HANDLING HEAVY COMMODITIES

at the lowest possible rates. The cost of packing and packages must also be borne in mind, for it is obviously poor economy to save fifty cents in freight charges if it costs seventy-five cents more to pack in the manner necessary to secure a lower rating. The following factors must be considered in selecting the proper container and method of packing:

1. The safety of the goods,
2. The cost of the package
3. The effect of the kind of package on the rating;
4. Labor costs of packing in various ways
5. Segregation of articles of one class in one container.
6. Comparative weights of various types of containers which are suitable for shipment of goods

The Safety of the Goods

The first consideration in packing is, of course, the safety of the goods. Goods must be so packed and placed in containers of such strength that they will arrive at destination in undamaged condition. An article which really requires a box should never be shipped in a crate merely to save freight charges, for a slight damage to the contents will affect any saving on rates. The material of which the container is made should be of sufficient strength to withstand the strain to which it will be subjected. A few cents saved by selecting a container made of board too thin to stand pressure will be lost many times over by the damage arising out of the crushing of the contents. The carriers have sought to regulate the minimum strength of containers by prescribing, in Rules 40 and 41 of the Consolidated Freight Classification, standards governing the construction, material, and fastenings of various types of containers, the maker's certificate, and the test requirements of fiber or pulpboard containers.

RULE 40

Section 1. Boxes, unless otherwise provided in Rule 41, must be made of iron or steel or of wood, with solid or closely fitting sides, ends, tops and bottoms, securely. Wooden boxes of unusual size or carrying unusual weight must be strapped or be reinforced by cleats.

Section 2. (a) Pails, firkins, kits and tubs must be made of wood, indurated fibre, compressed pulp or of iron or steel, except as provided for by Rule 41. (b) When made of iron or steel, tops must fit closely and must be secured by crimping into the sides, or by one or more iron or steel clamps extending across the top and securely clamped to opposite sides, or securely clamped to sides by not less than four iron or steel clamps or lugs, or when friction tops are used, they must be completely and securely set in place and tightly clamped to sides by not less than two iron or steel clamps or lugs.

RULE 41

Ratings, materials, construction, fastenings, interior packing requirements, certificate and tests for strength are provided for fibre board, pulpboard, double-faced corrugated strawboard containers including:

1. Boxes;
2. Drums and Pails;
3. Barrels;
4. Baskets.

In addition to the rules mentioned above, Rule 5 of the Consolidated Freight Classification provides for: (a) the form in which freight must be tendered for transportation; (b) the ratings for freight in various types of containers; (c) the penalty rating for goods in containers not in accordance with the specification of one class higher; (d) the acceptance by carriers of freight only when in containers of sufficient strength to afford reasonable protection; (e) the protection of fragile articles by packing material within the container; and (f) the construction of con-

tainers of materials sufficiently strong to "protect the articles against the ordinary test of transportation."

The Cost of Packing

Material and labor costs must be balanced against savings in rate made possible by use of other types of containers. If a saw is acceptable and secure when boarded, it does not pay to box it in order to obtain lower rating. Extra freight charges will be paid on the greater weight, and possible savings offset. Each kind of freight must be analyzed and costs of various types of containers ascertained before this problem can be solved. The following items must be considered:

1. Rating of goods if boxed
2. Rating of goods if crated
3. Difference in rate
4. Cost of lumber for box
5. Cost of labor for box
6. Cost of lumber for crate
7. Cost of labor for crate
8. Difference in weight of crate and box

Segregation of Shipments into Classes

Large orders, embracing a variety of articles of different ratings, should not be packed indiscriminately into boxes without regard to the ratings of the items in the mixture. Rule 12, Section 3, of the Classification provides that the charges for a package containing freight of more than one class shall be at the rating provided for the highest classed freight in the package. Mixtures of first-, second-, third-, fourth-, and fifth-class freight are charged for at the first-class rate, though there might be only 5 per cent of the weight of first-class freight, 20 per cent of third class, and 75 per cent of fifth class. Obviously, the mixing of such freight is extravagance, unless each package when packed with goods of one class is of less than the minimum weight,

so that minimum charges are applied. All first-, second-, third-, fourth-, and fifth-class goods should be packed in separate containers whenever possible.

Selecting Containers of Proper Size

When lumber was cheap and transportation rates were low, little attention was given in many establishments to the selection of containers to fit contents. Old boxes were often used and if the box made or selected from among those on hand was too large to fit the contents nicely, the empty spaces were often filled with excelsior or paper. Lumber was wasted, and freight charges were often paid on excess packing due to this careless selection of containers. High freight rates have put too great a penalty on this offense against good packing. A number of modern shipping departments have installed packing tables, fitted with adjustable sides and top. On these tables the freight to be packed is placed as in a skeleton box and the exact size of the container needed may be determined. The use of this device saves lumber and labor as well as freight charges.

Selecting the Proper Type of Containers

The nature of the goods to be shipped determines the kind of containers best suited. The trend of the times is away from the heavy wooden containers usable for only one trip and then destroyed, and toward the multiple-trip containers, or the lighter composition-board containers.

At one time the railroads returned empty containers free of charges to the shippers. This encouraged the use of durable containers, capable of making many trips. Eggs, bread, milk, and a number of commodities were shipped to market in such containers, which were returned to the shippers free and used over and over again. The railroads now charge for the return movement of such containers, so the tendency has been to make them of lighter material,

and thus avoid excessive charges. Specially designed containers, light but strong, are on the market and are used by shippers needing such specialized types of containers.

The lightweight composition-board containers are also being extensively used. They are usually much lighter than wooden containers and, provided they are sufficiently well constructed of material strong enough to stand the strain of transportation, are very economical. A number of industries are using fiber or pulpboard containers exclusively, and find them entirely successful. Fiber-board and wooden box manufacturers are eager for an opportunity to demonstrate the advantages of their containers, and reliable information as to construction, test strength of materials, and other data may be readily obtained from them. Each traffic manager must analyze the needs of his particular industry and obtain all the data possible as to the advantages and disadvantages of various types of containers. The proper type can be selected only after exhaustive analysis and experiment. Once the most satisfactory type of container is determined upon, it should be used exclusively.

Packing Specifications

Packing charts are prepared by many traffic departments for the guidance of the shipping room. These charts show the manner in which the articles shipped by the industry are to be packed and the ratings applied by the freight classifications to the goods packed in various containers. Packing specifications, special instructions as to the way goods are to be packed for certain sections of the country and of the world, and carload minima are also shown. These instructions are regarded as standing orders and are revised from time to time as changes are made in classification or as new types of containers are selected for use.

Standard procedure is specified for the packers, to guide

them in sorting and arranging goods in the containers. Usually a copy of the order, or invoice, is sent to the shipping room with the goods from stock to fill the order. Checkers are required to compare the goods with the items shown on the list and to sign a receipt for the goods if all items on the list are received. This record is kept by the storekeeper to account for his goods. After the packers have received the goods to be packed, they select containers of the proper kinds and sizes and pack the shipments, using sufficient inside protection to absorb the shocks for the protection of fragile articles. A packing slip, verifying the count, is often packed in the box with the name or number of the packer. Disputes as to the contents, or claims from consignee alleging concealed loss, may thus be traced to the man actually packing the goods.

The carriers and many shippers recommend that another slip or tag, containing the name and address of shipper, consignee, and destination, be packed in the box. In this way a box which has lost its outside marks may be opened and information enabling carriers to identify the shipment can be obtained.

After these operations have been completed the freight is ready for marking.

Marking Freight for Shipment

What Constitutes Proper Marking

Proper marking on shipments is an important part of the work of the shipping department. All less-than-carload lots of freight offered to the rail lines for transportation must be plainly marked. The marks may be made by brush, stencil, marking crayon, rubber or metal type, label, tag, or any other equally durable and legible device.

Marks may show only one consignee, station, city or town, and state of destination.

Importance of Proper Marking

Proper marking is insisted upon by all carriers because of the large number of shipments that are on hand at various railroad stations without any marks to identify either the shipper or the consignee. Marks become obliterated and the carriers cannot identify the goods. Meanwhile consignees do not receive shipments and claims are made. Hundreds of thousands of dollars are wasted annually on account of marks becoming obliterated and tags being lost or mutilated.

Carriers' and shippers' organizations throughout the country are striving to bring about better marking practices in order to reduce this huge annual loss.

Official Marking Rules

The carriers officially specify the methods to be used in marking shipments by rules of the Consolidated Freight Classification.

RULE 6

Section 1. Freight, when delivered to carriers to be transported at less than carload or any quantity ratings, must be marked in accordance with the following requirements and specifications, except as provided in Section 2 (b) of this Rule or otherwise provided in specific items in this Classification or in the Interstate Commerce Commission's Regulations for the Transportation of Dangerous Articles other than Explosives by Freight. If these requirements and specifications are not complied with, freight will not be accepted for transportation.

Section 2. (a) Each package, bundle or loose piece of freight must be plainly, legibly and durably marked by brush, stencil, marking crayon (not chalk), rubber type, metal type, pasted label (see Note 1), tag (see Note 2), or other method which provides marks equally plain, legible and durable, showing the name of only consignee, and of only one station Town or City and State to which destined.

When consigned to a place of which there are two or more

of the same name in the same state, the name of the County must also be shown.

When consigned to a place not located on the line of a carrier it must also be marked with the name of the station at which consignee will accept delivery.

When consigned "To Order" it must be so marked, and further marked with an identifying symbol or number which must be shown on shipping order and bill of lading.

Packages containing fragile articles or articles in glass or earthenware must be marked "Fragile—Handle with Care," or with similar precautionary marks.

NOTE 1. Labels must be securely attached with glue or equally good adhesive.

NOTE 2. Tags must be made of metal, leather, cloth or tagboard. Tagboard tags must be of rope, jute or sulphite fibre stocks, separate or combined, not less than 0.014 of an inch in thickness, having a resistance of not less than 100 pounds to the square inch, Mullen Test, with paper patch reinforcement.

Tags used to mark wooden pieces or wooden containers must be fastened at all corners and center with large headed tacks or tag fasteners; or

Tags must be tied to wooden pieces when the freight would be injured by the use of tacks or tag fasteners.

Tags attached to bags, bales, bundles or pieces must be securely fastened with strong cord, wire or blunt or dull pointed wire tag fasteners, except that when attached to bundles or pieces of metal they must be securely fastened with annealed wire No. 23 gauge or larger, or with two-ply rope or twine having a breaking strength of not less than 150 pounds through a paper patch reinforced with a metal eyelet.

(b) A shipment that fully occupies the visible capacity of a car, or that weighs 24,000 pounds or more, when shipped from one station, in or on one car, in one day, by one shipper for delivery to one consignee at one destination, need not be marked.

(c) The marks on bundles, packages or pieces must be compared with the shipping order or bill of lading and corrections, if necessary, made by the shipper or his representative before receipt is signed.

(d) Old consignment marks must be removed or effaced.

(e) Freight in excess of full cars must be marked as required for less than carload freight, except where such excess is 20,000 pounds or more.

Section 8 of Rule 24 provides that freight in excess of full carload must be marked as required for less-than-carload freight, except as provided for in Rule 6 of the Consolidated Freight Classification.

Marking Loose Freight

Freight which is accepted for transportation without being packed in containers should be marked. Castings, pipe, bar iron, steel plates, and like articles should have marks stenciled whenever a space large enough can be found. If not, durable tags, such as provided for in the Classification, Rule 6, should be used. Many large shippers of freight of this sort not only tag the individual pieces, but stripe the articles with paint marks of a distinctive color. Thus a shipment of loose castings would be tagged as below:

<i>From: AMERICAN MANUFACTURING COMPANY, NEW YORK, N. Y.</i>	<i>Consignee:</i>	General Steel Company,
	<i>Address:</i>	100 Washington Avenue,
	<i>City and State:</i>	Johnsonburg, Tenn.
	<i>Marks:</i>	Green Stripe
	<i>Pieces:</i>	On 100 pieces

FIG. 5.

In case several of the tags were lost or mutilated beyond identification, the stripe of color would enable the agents

of the carriers at junction points and at destination to separate that particular shipment from other shipments of castings in the car.

Machine Marking

Stencils cut with the name and address of the customer are often used by industries shipping with reasonable regularity to the same customers. These stencils are kept in alphabetically arranged bins or racks, where they can be found easily when they are needed. However, stencils are not practicable when frequent shipments are not made to one consignee. In such cases, brush or other marking devices are used or, in large establishments, marking machines. These machines mark packages rapidly and legibly and have proved highly satisfactory to many shippers.

Special Marks

In addition to the marking required by the rules of the carriers, many shippers of freight have developed systems of marking designed to meet their individual needs. Shippers of fragile articles, for example, supplement the marks, "Fragile—Handle with Care," with more detailed instructions as to handling. If the fragile goods are electric light bulbs, for example, an outline sketch bulb is shown on several sides of the case with the warning, "Glass—Handle Carefully," or some similar warning. The use of an outline or other symbol has the effect of bringing the fragile nature of the contents of cases more prominently to the attention of the freight handlers.

Manufacturers of articles that are widely advertised frequently use marks on the cases containing their shipments that are of a supplementary advertising nature. The trade name of the article is stenciled or branded on the container, so that "all of the world" may know what the box contains. This serves the double purpose of a warning, if goods are of a fragile nature, and of advertising the goods.

Special marks are sometimes used for supplementary identification purposes. Consignees often request that marks and case numbers be stenciled upon their cases, so as to lessen the risk of loss through misidentification. Marks such as hollow squares, triangles, circles, or crosses, flanked with the company's initials and case numbers, are commonly used for this purpose.

In addition to the mark indicated the case number is often stenciled, so that each case may be identified and the contents checked against the invoice. The number of pieces comprising the shipment is indicated in many instances so that freight handlers may keep the shipments intact. The full marks usually shown consist of:

1. Consignee's name
2. Consignee's complete address
3. Shipper's name
4. Shipper's address
5. Route
6. Consignee's mark
7. Number of cases
8. Case number
9. Warning marks
10. Trade-mark or brand.

Thus, a case is marked on several sides.

To: GENERAL STEEL COMPANY,
100 WASHINGTON AVENUE,
JOHNSONBURG, TENNESSEE.

G  CO.

JOHNSONBURG,
TENN.

Case No. 38

On 40

Warning Marks

The rules of the carriers and the statutes of the United States prescribe the safeguards which must be used in the transportation of inflammable and explosive commodities. Carriers are permitted to transport articles dangerous to life and property only when stringent regulations as to marks have been complied with.



FIG. 7. LABEL FOR DANGEROUS FREIGHT

Rule 42 of the Consolidated Freight Classification contains extracts from the Revised Statutes of the United States, governing steamboat service, that apply to the transportation of dangerous articles.

Section 4279 of the Revised Statutes of the United States provides, in part, that packages are to be marked on the outside in a conspicuous manner with the name of the dangerous article followed by the word "dangerous."

Shipments of nitroglycerine must be marked "Nitroglycerine—Dangerous."

Rule 39 of the Consolidated Freight Classification provides that explosives and dangerous articles other than explosives must be packed and marked in accordance with the rules and regulations prescribed by the Interstate Commerce Commission.



FIG. 8. PLACARD FOR CAR CONTAINING DANGEROUS FREIGHT

These regulations were prescribed under the Act of March 4, 1909, and by Section 15 of the Act to Regulate Commerce, as amended June 18, 1910. The revised rules coincide with the rules of the American Railway Association, and are numbered correspondingly.

Red labels are prescribed for inflammable liquids; yellow, for inflammable solids and oxidizing materials; green, for noninflammable gases, and white for acids. These labels are similar to the one shown in Figure 7.

Not only must all packages containing such dangerous freight be carefully labeled, but the car containing such shipments must be placarded on the outside with 10¾ inch placards, warning railroad employees of the contents of the car. A slightly smaller card, 8½ inches square, must be securely attached to each outside end and to each side door of a box or stock car containing one or more packages



FIG. 9. PLACARD FOR CAR CONTAINING ACID

protected by the white diamond label, and to each side and end of a tank car containing an acid or corrosive liquid.

Shipments of explosives must be marked as prescribed in the Classification rules and cars containing such freight must be placarded with a card on each outside end and side door, not less than 4½ feet from the car floor so that it can be readily seen. The placard must be printed in red and black letters on strong tag board.

It is, of course, impossible as well as impracticable to attempt a detailed analysis in this chapter of the precise marking requirements of explosives and inflammables. Those particularly concerned may consult the rules and regulations of the Interstate Commerce Commission, which are reprinted in full in the Consolidated Freight Classification.

Weighing Shipments

All outbound shipments, both carload and less, are weighed at the plants of the larger shippers. Platform scales are usually provided for weighing goods on trucks as they pass over the scales. A number of portable scales are provided for weighing individual cases and smaller scales for net weighing the contents of cases and for small express and parcel-post shipments. Track scales upon which cars of freight may be weighed, are maintained by many large industrial plants that have their own private sidings and plant transportation systems.

It is a common practice among industrial shipping organizations to make one man responsible for the weighing of all less-than-carload shipments and to put another in charge of weighing all carload shipments. This division of labor is carried even further in larger organizations, such as are shown in Figures 1 and 2. A weigher supervises the actual weighing of the goods, while a weight record clerk attends to entering the weights upon shipping documents and the permanent records of weight that are kept by the department. The weighmaster in charge of the track scales weighs carload shipments, while a scale clerk enters the records of the shipments weighed.

Usually the less-than-carload weighers and clerks report directly to the head of the shipping department, and sometimes this is true of the carload weighmaster. This is by

no means a universal practice, however, for the weighing of carload shipments is so intimately connected with the work of the plant transportation department that in many organizations the carload weighmaster is a member of this branch of the traffic department. For this reason, and for the further reason that the rules and regulations prescribed for weighing cars require more detailed discussion, this subject is discussed in connection with plant transportation (see Chap. V).

Weight Agreements

Not all shipments need be weighed. This is especially true in industries that manufacture a uniform product or several standard products and ship them in uniform packages, each containing an equal weight of goods. Such shippers usually enter into weight agreements with the carriers by the terms of which the carriers agree to accept the shippers' weights and descriptions of shipments. Representatives of the Freight Inspection Bureaus ordinarily inspect the shipments, and the shippers and carriers agree upon a unit weight that is satisfactory to both parties.

The weights agreed upon are thereafter accepted by the carriers as the bases upon which charges are assessed. The fact that the weights used are authorized established weights is shown upon bills of lading, waybills, shipping tickets, and weight certificates, and are usually not reweighed by the carriers. Inspections are made from time to time by representatives of the carriers and Inspection Bureaus to verify both weights and descriptions. If errors in either are found by inspection of the shippers' records, or by reweighing, the proper corrections are made and the charges adjusted to the proper basis.

The agreements between the shipper and the carriers with whom they are entered usually contain the following provisions:

1. The shipper agrees to report and certify to the carrier, the correct gross weights and correct descriptions of commodities on the shipping orders, bills of lading, or weight certificates, by placing thereon an imprint of the certification stamp. When the weights are obtained by weighing on track scales, the correct gross, tare, and net weight must all be given.

2. When the weights of articles of uniform or standard weight are based upon averages, the shipper must give prompt notice to the authorized representative of the carrier when any change is made which will affect the weight arrived at by use of the average. This includes any change made in package or material used.

3. The shipper must keep in good weighing condition all scales used in determining weights and have track scales tested, maintained, and operated in accordance with the Track Scale Specifications and Rules which have been approved by the American Railway Association. The shipper must also allow the authorized representative of the carrier to inspect and test them.

4. The shipper must keep his records in such manner as will permit correct and complete checking, and shall allow the authorized representative of the carrier to inspect the true and original sheets, books, invoices, and records necessary to verify the weights and descriptions of the commodities certified to in the shipping orders, bills of lading, or weight certificate.

5. The shipper must pay promptly to the authorized representative of the carriers, bills for all underweights from original point of shipment to final destination that result from certification of incorrect weight or improper description, whether shipment is sold f.o.b. at point of shipment or elsewhere. Overcharges developed by check of shipper's records are promptly certified by the authorized representative of the carrier in writing for proper adjustment.

6. Shipments made under a weight agreement are subject to the rates, charges, minimum and estimated weights prescribed by classifications, classification exceptions, or tariffs, or by rules of the carriers interested in the agreement.

7. The agreement may be canceled by ten days' notice in writing to either party. It is understood that the shipper shall permit check of the business and pay undercharges on all shipments that have been made prior to the cancellation.

Weight Notices

Many industrial traffic managers, especially those that ship to individual consumers who are not familiar with the shipping and receiving of goods, affix notices to the bills of lading or notices of shipment that are sent to their consignees indicating the correct weight, either actual, authorized, or estimated, and caution them not to pay charges on any higher weight basis without verifying the weight claimed.

When the packages have been individually weighed, the weight is stenciled on each piece and the proper weight noted on bills of lading, invoices, and shipping notices.

A copy of a typical weight notification is shown below:

AMERICAN MANUFACTURING COMPANY**NEW YORK***Weight Notice*

The correct $\left\{ \begin{array}{l} \text{actual} \\ \text{authorized} \\ \text{estimated} \end{array} \right\}$ weights upon which this shipment is billed
are shown on each piece of freight.

Do not pay freight charges on higher weights without verification.

.....
Traffic Department

FIG. 10.

CHAPTER IV

RECEIVING FREIGHT

The Functions of Receiving Departments

Receiving freight is the term applied to the process of taking delivery of goods from the carriers, checking the packages and contents for quantity and condition, and the handling of shipments until they are ready to be taken into stock. It is the function of receiving-room organizations in industrial plants to attend to the handling, checking, and sorting of incoming supplies and materials, and to the keeping of adequate records of the goods received.

Receiving is intimately connected with shipping and with local and plant transportation. For this reason it is not uncommon to find receiving organizations attached variously to shipping bureaus or to local or plant transportation departments. In other cases the receiving department includes one or both of these latter departments. Large industrial establishments that receive as well as ship considerable quantities of freight usually have separate shipping and receiving subdepartments or bureaus. These organizations are usually subdivisions of the traffic departments, as are the local and plant transportation bureaus.

In the larger typical industrial establishments that operate their own motor trucks, under the supervision of the local motor transportation bureau, the responsibility of the receiving room commences when the goods are delivered by the truckmen at the receiving platform. Express shipments are received here from the trucks of the express company, and parcel-post matter from the U. S. Post Office Department.

Ferry cars, containing less-than-carload freight from the local railway freight stations, and carload shipments, are unloaded, checked, and sent to stock under the supervision of the receiving organization.

Types of Organizations

Various plans of organization are found, depending upon the size of the industry, the nature and amount of tonnage, and the kind of business in which the establishment is engaged. Briefly, the organization of the receiving room is affected to the same extent and by the same factors that influence the organization of the shipping room. These two subdivisions of the industrial traffic department are true twins, so that the factors influencing one usually affect both.

The most elementary type of receiving-room organization is supervised by a receiving superintendent, or foreman, who manages his subdepartment as a deputy of the traffic manager. This superintendent, or foreman, is directly responsible to the manager of the traffic department for the proper management of the bureau.

Several checkers, or receiving clerks, attend to the receiving of inbound shipments from the trucks of the local motor-transportation department, or from the express companies and motor lines. These men also check the contents of ferry cars and solid merchandise cars that are delivered by the carriers. A number of truckmen take the goods from the vehicles and cars to their proper storage places. The weights of inbound shipments are verified, if this is necessary, by reweighing the packages or reweighing the solid cars. In the first instance, a weight clerk supervises the weighing of the goods on the platform or portable scales, while in the latter case, incoming carloads are weighed by the track scale master. This man is usually a subordinate of the plant transportation division, although

the records of his weighings are often sent to the receiving department. A billing clerk or invoice record clerk, or several of them, attend to the comparison of inbound billing with the invoices or purchase orders, copies of which are sent to the receiving department by the purchasing department.

Over, short, and damage clerks make records of exceptional shipments, so that claims against the carriers or shippers may be made. This work is often done by the receiving clerks, who receive the shipments. A typical organization of this type is shown in Figure 11.

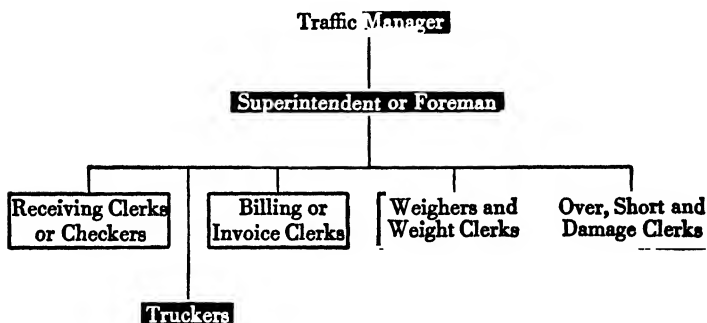


FIG. 11. TYPICAL RECEIVING DEPARTMENT ORGANIZATION

Special Organizations

Industries that receive materials of unusual weight or size sometimes have receiving room organizations that differ somewhat from that outlined above. In the case of an iron and steel company, the traffic department of which was included in those outlined in Chapter III, a number of crane operators and chain gangs are required to attend to the handling of heavy beams and girders.

Large receiving-room organizations that handle a heavy volume of less-than-carload freight have further subdivisions of labor, so that one group of men does nothing but

unpack cases. The contents of the containers are examined by an inspector, so that all concealed losses and damages may be discovered and reported immediately by a responsible man.

Plants that receive special types of freight, which require special loading and bracing in the cars, often have one or several gangs of stevedores who are trained in unloading these special kinds of goods. Automobile factories and assembling plants, for example, often have gangs of stevedores who are specialists in unloading motor bodies. These parts come into the plant in carload quantities from the factories of the body builders and are specially loaded and braced to get as many bodies in the cars as can be loaded without danger of damage. The unloading of these cars is a difficult task, for if the bodies are taken out by men without special skill, damage is apt to result.

An almost endless list of variations from the typical receiving organization might be cited. Suffice it to say that, in general, the vast majority of receiving bureaus are organized so that one or several men perform all of the tasks indicated in the typical chart. Several of these tasks are attended to by one man in smaller organizations, while in the larger establishments there are even further subdivisions of labor resulting in a number of specialized tasks that are not found in the general run of departments.

Receiving Goods from the Carriers

As the goods are delivered to the receiving platforms by the motor trucks of the industry, or by the vehicles of the express and motor carriers, a receiving clerk accepts the packages and signs a receipt for them if they are apparently in good condition and all of the pieces in the shipment, as shown in the freight bill, are there. If the goods are obviously damaged or fewer pieces than billed are delivered, the receiving clerk indorses the nature and extent

of the damage or shortage upon the receipt that he gives the driver. On the other hand, if more goods are received than the billing calls for, an "over-notation" showing the number and kind of packages delivered in excess of the number billed is made upon the billing.

Shipments that are delivered to the receiving platform by the industry's own truckmen are received first by these employees at the freight stations of the carriers, as is described in the chapter on Local Motor Transportation. Over, short, and damage notations should be made on the delivery receipt by the truckmen at the freight depots, so the carriers have notice of such irregularities before the goods are accepted from their agents. These notations should coincide with the notations made at the receiving platform of the industry; if they do not, it indicates either that the truckmen have been negligent in receiving the shipment at the freight house, or that the damage or loss has occurred while the goods were in the possession of the truck driver. In either event the responsibility for the condition of the goods is established.

In most industrial organizations the receiving clerk is responsible for the condition of the goods that he receives. If the proper entries indicating the nature and extent of damages, shortages, or excesses are made, he is absolved from any further responsibility. If no such records have been taken, however, the receiving clerk who has receipted for the goods is held responsible.

Records

Individual records are usually kept for each shipment received, whether it is in good condition or otherwise. These records, as a rule, contain the following information:

1. The name and address of the shipper
2. The point of shipment

3. The date of shipment
4. The waybill number
5. The date of the waybill
6. The number of pieces
7. The kind of packages
8. The weight
9. The receiving number or other identifying mark that has been placed upon the shipment by the receiving clerk or checker ;
10. The date of delivery
11. The kind of transportation service used and usually the route
12. Information which will enable the freight bill auditing division or other branch of the industry to check the transportation charges

These records are adapted to meet the peculiar needs of different industries, so that additional identifying information is added in some cases, while in other instances all of the information provided for in the typical list shown above is not needed. The receiving clerk usually is made responsible for the preparation of these record sheets in the first place. From him they go to the office of the head of the receiving department, where the clerical staff completes the records and sends copies of the sheets to the heads of all departments that are interested in the shipments.

Reports which contain notations of shortage, excess, or damage are sometimes made on paper of a different color, or on different kinds of forms, so that such report may be readily distinguishable from the records of goods received in perfect condition. Copies of over, short, and damage reports are verified by the chief receiver or by special O. S. and D. clerks in the receiving-room office, and copies are sent to the claim bureau of the traffic department, to the purchasing department, to the stock or stores department, and to the accounting departments, so that appropriate action may be taken against the carriers or shippers that are responsible for the condition of the goods.

Examination of Contents of Packages

The great majority of industrial receiving bureaus have all packages examined as soon as they are received. If the external covering of the container, or if the container, indicates that there has been breakage, leakage, or pilferage, a notation is made upon the receiving reports and the suspected packages are separated from the other freight, so that they may be opened and the contents examined. Checkers or inspectors supervise the unpacking and make a full report of the extent and nature of the damage.

The agents of the delivering carriers are notified at once, often before the package is opened, so that the carriers may be in possession of exact information of the amount of the concealed loss or damage. The better practice, without doubt, is for the carriers' agents to be notified before the package is opened so that no question can be raised as to the accuracy of the check of the condition of the contents of packages when the claim to cover the concealed losses and damages is filed.

Checking Contents

Packages of freight that do not indicate damage or loss are unpacked by the unpackers or stock men. Two general systems of checking are used in industrial establishments to account for the contents of packages received from the transportation companies. The first method is known generally as the invoice check. The unpackers and checkers are supplied by the purchasing department with a copy of the invoice covering the goods. As the cases are unpacked the items of the invoice are checked against the contents of the containers. If the contents of all the packages comprising the shipments correspond exactly with the items of the invoice, the invoice is approved and a clear receipt is made.

The second method of checking is the blind check. The

containers are opened and unpacked in the presence of checkers, who make a count and record without consulting the invoice. After the entire shipment has been checked in this way the record is turned in to the receiving office and there the blind check is compared with the invoice. If they agree, the invoice is approved; if not, the carrier is notified so that an inspection may be made. The blind checking system has the advantage of placing the checkers on their mettle to count accurately without knowing what to look for, but has a disadvantage in that it tends to increase, to some extent at least, the time elapsing between the checking of the goods and the notification of the carrier in case of loss. If the goods are checked against an invoice, the fact that there is a shortage becomes apparent as soon as the shipment is checked, while this fact will not be developed if the goods are checked blindly until the records are compared with the invoices. Both systems, however, have enthusiastic advocates.

Identification of Shipments

Copies of all purchase orders are sent by many purchasing departments to the traffic departments of the companies at the time the orders are sent to suppliers. Other purchasing agents notify the traffic manager in other ways that orders have been placed. The tendency is growing of giving the traffic department some kind of written notice that goods have been purchased, so that the receiving department can be informed of the quantity of freight to be handled, and so that only shipments that have been actually purchased may be received. Many receiving departments are instructed not to receive shipments for which they have received no purchase orders. In this way shipments not actually ordered may be refused.

As was stated above, copies of invoices are also sent to the traffic department, and from here to the receiving room,

so that shipments may be doubly identified before they are received and checked.

Delivery to the Stores Department

The goods, after they have been received, checked, and recorded, are turned over to the stock or stores departments unless there has been a special order that they be delivered to some other department. Construction material or special equipment is sometimes received and accounted for by the regular receiving-room employees and turned over directly to the departments which have requisitioned the material. In such cases, receipts are usually taken for the material which is turned over to the stores or stock department, a copy being retained, in most instances, by the receiving office, as its record of the transaction.

A number of companies do not permit any materials or supplies to be delivered directly by the receiving department to any other department, but require all goods to be distributed by the stores department. The actual material may not be handled by the men in the stores department. The receiving department notifies the stores department of the arrival of the goods, and that organization attends to arranging for the delivery of the goods to the places where they are needed by the department to use them. The receiving department is done with the goods when they have been placed and a receipt has been obtained from a representative of the stores department. Records of the disbursement of goods to users are taken care of by the stores department.

Receiving Guides

Reference has been made to the shipping guides or charts that are prepared by many industrial traffic departments to show the standard packing specifications. Similar guides are often drawn up to guide the receiving room and the local transportation department. The method of packing

that has been prescribed for the supplier to use, the kind of container, the inside protection of packages, the kind of transportation service required to be used, the route, the sorts of articles that are to be packed together, the marking, and other specific instructions that have been given to the shippers making regular shipments are shown on these guides. Occasional shippers are given instructions with each order. A number of concerns issue specific instructions at the time each order is placed as to:

1. The kind of package to be used
2. The minimum strength of the containers
3. The kind of inside packing to be used
4. The kind of bracing, if a carload
5. Full route and class of service, rail freight, express, water, parcel post, or motor truck
6. The way the goods should be separated to obtain lowest rates, if a mixture of goods of several classes
7. Special instructions if freight is urgently needed
8. Marking requirements
9. Additional special instructions

Concerns which use either the chart and supplementary shipping specification order system or the plan of giving instructions with each order keep the receiving rooms informed by sending copies of the orders to them, and by keeping the specification guide or chart corrected currently.

Shippers' Errors

The great majority of industrial concerns take some sort of action in case shipments are received, packed, protected, marked, loaded, or shipped contrary to specifications. Violations are reported to the traffic manager, or the matter is brought to the attention of the shipper and an explanation is sought. If the explanation is unsatisfactory and the violation has resulted in slow delivery, loss of money through the collection of higher rates of freight, or other

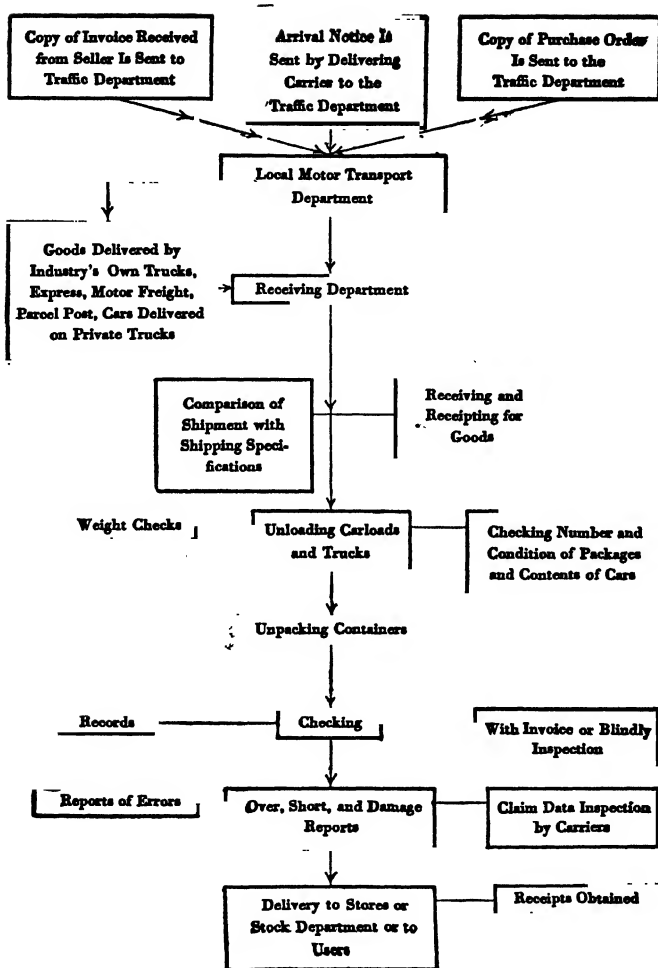


FIG. 12. FUNCTIONS OF THE RECEIVING DEPARTMENT

loss that cannot be collected from the carriers, the shipper is required to reimburse the consignee for the loss.

The traffic department or the receiving division of the department usually advises the purchasing and accounting departments of violations of shipping instructions, so that the losses may be collected and steps taken to eliminate the condition. If a shipper continues to ignore the instructions, or is careless in permitting errors to continue that result in losses to the consignee, steps are often taken to cancel the orders and buy elsewhere. In some cases shipments that are incorrectly shipped are returned at the shipper's expense, although such drastic action is not common.

Shippers are often recharged with the value of merchandise which checks short, when it is apparent that the shortage existed before the goods left the consignors' places of business, so that the carriers are not responsible. If there is any doubt as to whether a concealed loss is chargeable to the shipper or the carrier, both parties are usually notified so that the consignee is sure to recover, either from the seller or the transportation line.

The Progress of Shipments through a Typical Receiving Room

The functions of the receiving rooms of the typical industrial establishments can best be visualized in the accompanying chart (Fig. 12). Most shipments follow a fairly well defined routine and it is the exceptional consignment of goods that is handled otherwise than is indicated by this chart.

Receiving-Room Equipment

There is a growing tendency toward the use of mechanical equipment in receiving rooms. Not many years ago a few hand trucks, scales, hand hooks and case-opening tools

constituted the equipment of the average shipping and receiving room. With the growing use of the motor truck and the need for greater speed in handling goods over the shipping and receiving platforms so as to use the expensive motor equipment to the maximum, many progressive industries have installed chutes, roller and power conveyors, platform scales, portable scales, stationary and portable packing and unpacking tables, package-sizing tables, marking machines, label-attaching devices, and motor or electric tractors to draw truck loads of goods.

Even in the clerical branch of the organization, typewriters, billing machines, automatic tubes, telautographs, filing cabinets, and dictating machines have replaced the time-honored bill hook and lead pencil.

CHAPTER V

PLANT TRANSPORTATION MANAGEMENT

Functions of the Plant Transportation Department

There are, in the United States, some 6,500 miles of industrial tracks owned and controlled by industrial corporations, or by switching and terminal companies. These tracks are, in some instances, operated by industrial common-carrier roads that are owned and controlled by one or several of the industries served by them; in other cases the trackage may be used as private carriers or as plant facilities to serve only one industrial plant.¹ Whether the tracks have the status of a common carrier or a private carrier, they may be operated by a separate industrial road organization or by a department or subdivision of the proprietary industrial establishment.

Industrial lines that are separately incorporated as common carriers do not come within the scope of the present volume, for such roads are organized as miniature common carriers by rail and do not belong in a discussion of industrial traffic management. Plant facilities that are owned by a proprietary industry and managed as a department of the plant alone concern us here.

Plant transportation facilities of this type perform the following services for the industry:

1. The placing of inbound freight cars, that have been received from the rail carriers, at the spots where they are to be unloaded
2. The obtaining of equipment for loading
3. The placing of empty cars at required spots to be loaded

¹I. C. C. Bureau of Statistics, "Statistics of Railways in the United States," 38th Annual Report, for the year ending 1924.

4. The weighing of loaded inbound and outbound carload shipments and the light weighing of empty cars ordered to be loaded and cars after they have been unloaded in order that the tare weights may be verified

5. The switching of loaded or partly loaded cars from place to place within the plant for further loading or unloading

6. The delivery of empty cars and of outbound carload shipments to the interchange tracks between the plant system and the lines of the carriers and the preparation of releases to advise the carriers that empty cars are no longer required

7. The supervision of demurrage

8. The custody and maintenance of equipment, including plant trackage, locomotives, locomotive cranes, and private freight cars

Organization

The performance of these functions requires the service of trained locomotive engineers and firemen, crane operators, firemen, freight conductors and brakemen, switchmen, engine hostlers, watchmen, yardmasters, car clerks and other office workers that are specially trained transportation men. Many forms of organization are to be found among industrial transportation departments. A number of industries have set up intraplant transportation departments as independent organizations under the supervision of a superintendent of plant transportation or a department head with similar title. Such departments function as separate and distinct working units and are responsible usually to an executive officer of the corporation. A second form of local transportation organization is supervised by a superintendent or foreman who functions as the head of a subdepartment attached to the plant or works department and reports to the plant manager or superintendent. The third plan of organization places the plant transportation department as a subdivision of the traffic department. The work of the bureau is done under the supervision of a plant transportation superintendent who is responsible

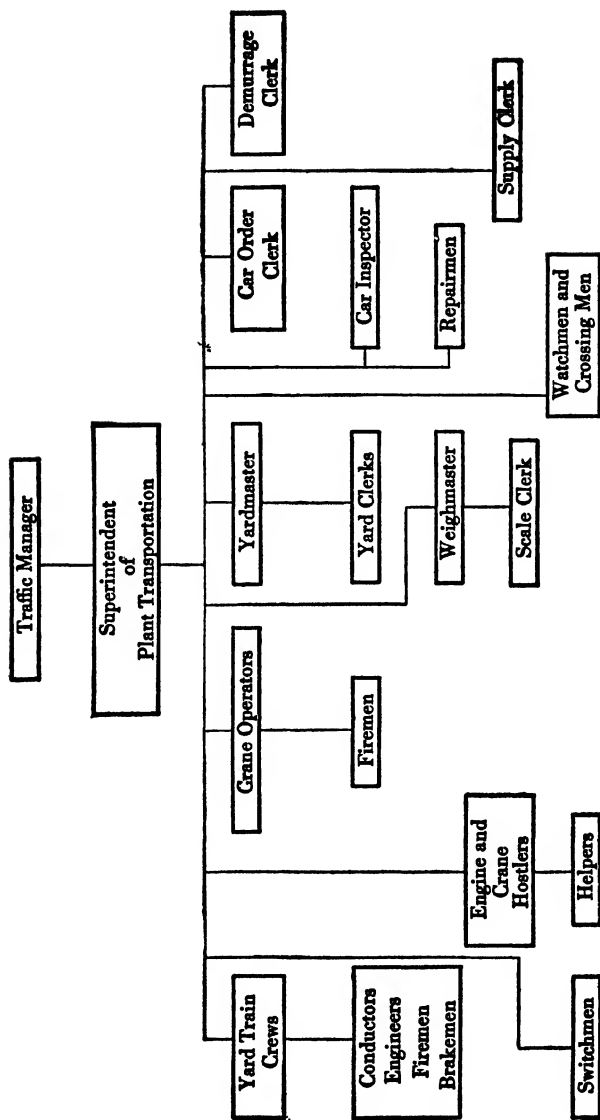


FIG. 13. TYPICAL ORGANIZATION OF A PLANT TRANSPORTATION BUREAU

to the traffic manager for the proper management of the organization.

As in the case of the administration of the shipping, receiving, and local motor transportation departments, it is desirable in the interests of efficiency that the plant transportation department be allied closely with the general traffic department so that all phases of traffic and transportation work may be coördinated under the direction of one responsible executive head. This is quite generally recognized in industry, so that modern industrial corporations place traffic managers in charge of all phases of transportation with specialists in rates, routing, claims, tracing, expediting, receiving, shipping, motor transportation, and plant transportation. All of these subdepartments or bureaus are under the direction of a general traffic manager who is responsible to the heads of the corporation for the harmonious working of all of these bureaus.

One of the largest industries in the United States, a Chicago packing house, delegates almost every transportation duty to its traffic department, and the few services which are not directly attended to by that department are so closely tied up with the traffic department that the departments actually performing the work are independent in name only.

A typical plant transportation bureau that functions as a subdivision of the traffic department is shown in Figure 13.

Car Spotting

Carriers that serve industries equipped with private trains and with locomotives to do their own intraplant switching deliver the incoming loaded cars and the empty cars that have been ordered for loading at the interchange tracks that connect the rails of the carriers with the plant tracks. Delivery of cars by carriers at such designated

industrial interchange tracks constitutes notification of delivery to the consignee.²

From the interchange tracks, the locomotives owned by the industry and operated by crews of engineers, firemen, conductors, and brakemen employed by the plant pick up the cars and distribute them to the places where they are to be loaded or unloaded. Departments of the industrial establishment that are to use the material or wish to have empty cars placed for loading notify the traffic department when and where the cars are required. The car clerk of the traffic department notifies the receiving and the plant transportation departments when the loaded cars are ready for delivery so the former organization can check the contents of the cars after the crews of the transportation department have placed them. Written orders are usually issued so that there may be no mistakes as to the spots where the cars are to be placed. Interoffice memoranda are addressed to the traffic department by the department requiring the cars to be placed. Corresponding orders are transmitted to the plant transportation department and to the receiving department in writing, informing them that the cars enumerated that are to arrive at a designated time are to be placed at certain places in the yard for unloading.

Orders for empty cars for loading are transmitted to the traffic department by the shipping department, or are placed directly with local agents of the carriers by the car service clerks of the shipping department or of the plant transportation department. In some cases, the ordering of cars for the accommodation of the outbound shipments of industries is attended to by a clerk or clerks of the shipping department, while in other instances a man in the plant transportation department attends to this. This lack of

² National Uniform Car Demurrage Rules, Rule 4, Sec. C; Rule 8, Sec. D, par. L.B.

uniformity can be ascribed to the fact that the task is a specialized one, requiring that the man in charge of the work be familiar with the kinds of equipment that can be supplied by the carriers. He must know the cubical capacity of different types of railroad equipment, the carrying capacity of special types of equipment, the clearances of bridges, tunnels, and curves that will be encountered over certain routes, so that equipment of certain sizes may be ordered for outgoing shipment. Freight charges are often based upon the size of cars ordered for use so that the proper ordering of cars is a necessary detail if transportation charges are to be kept at the minimum.

Car Orders

The American Railway Association has prescribed a standard form to be used in ordering cars so that cars of the proper size may be obtained. Orders from industries wishing cars are sent to the local freight agent of the carrier who allocates his available empty cars to the industries requiring them. If cars of the kind and size are not available at his station or in his district he requisitions the necessary equipment of the local car distributor of the road. If the cars are not available in the district of the car distributor he calls upon the distributor of the grand division or region or system until the desired type of equipment is obtained.

If the local agent cannot fill the orders for cars of special types or sizes before the required time of shipment, two smaller cars may be furnished in place of one larger, or another type of car offered the shipper. Larger cars are sometimes offered by the carriers instead of a smaller car that has been ordered by a shipper. In such cases the Interstate Commerce Commission has held that if the shipment could have been loaded into or upon a car of the size and capacity ordered the minimum weight to govern the

shipment through to destination must be fixed upon the basis of the minimum of the car ordered.

It is the duty of carriers to provide reasonable facilities for transportation and if they cannot furnish equipment to move the carloads provided for in their regulations, it is clearly their duty to provide some other method for transporting as one shipment, and at the rate provided therefor, such carload weight when tendered by a shipper.³

If cars other than the kind ordered are used an indorsement should be made upon the bill of lading and upon the carriers' waybill, showing:

1. The capacity of the car ordered
2. The date of such order
3. The number, initials, and capacity of the car furnished

The Commission has held that the rate and minimum applicable to the car ordered apply if a shipment is loaded into two smaller cars furnished by a carrier in lieu of one larger car ordered by a shipper and that the shipper is entitled to all privileges in transit, reconsignment, switching, and demurrage charges as though the shipment had moved in the car ordered.⁴

The standard car order form, now generally used by industrial traffic departments, contains sufficient information so that the carriers' agent may know precisely what kinds and sizes of cars are required. The form shows the kind of cars, box, gondola, flat, stock, refrigerator; the number of each kind; the sizes; the date required; the spot to be placed; the goods to be loaded; the destination and the route to be used. The information as to destination and route is needed by the carriers so that, whenever it is possible, cars of foreign line may be routed in the direction of

³I. C. C. Administrative Ruling 66.

⁴I. C. C. Conference Ruling 339. See also *General Chemical Co. v. N. & W. Ry.*, 15 I. C. C. 349; *Milwaukee Falls Chair Co. v. C., M. & St. P. Ry.*, 16 I. C. C. 217; *Noble v. B. & O. R. R.*, 22 I. C. C. 432.

the home road. A shipper in New York requesting a car for a shipment for Chicago would be given, if possible, a car of a road that serves Chicago. Shippers' Regional Advisory Boards and the American Railway Association are aiding in keeping cars loaded toward their home roads so as to reduce empty car mileage.

AMERICAN MANUFACTURING COMPANY							
NEW YORK, N. Y.							
Agent's Order No.....				Shipper's Order No.....			
..... Agent				(Date)			
..... Railroad				.....		
DEAR SIR:							
Please arrange to furnish empty cars, not previously ordered, as shown below.							
It is agreed that cars will be loaded, consigned and routed as indicated.							
CARS WANTED			Date Wanted	Where Wanted	Lading	Destination	Route
Number of Cars	Kind of Cars	Length					
AMERICAN MANUFACTURING COMPANY							
.....Traffic Manager							

FIG. 14. CAR ORDER FORM

Cars that are urgently needed are sometimes ordered by telephone calls and written confirmations, shown to be such, are sent to the agents of the carriers that have furnished the equipment. Figure 14, properly indorsed, is often used for this purpose.

A record is usually kept of the car orders that have been placed in an index file so that the orders may be urged if they are not filled promptly. Car orders are sometimes made in duplicate, the original being sent to the agent of the carrier and the duplicate filed in the live-order file until the car is placed, and then transferred to a permanent record file for future reference.

Intraplant Switching

Movement orders are issued to the plant transportation department for the movement of cars from place to place within the plant. Goods in the process of manufacture need to be moved from shop to shop so that further manufacturing may be done. Move orders are made up and sent to the plant transportation department by the work order clerks in the works or manufacturing departments. These orders are transmitted to the crews to perform the switch movements by the car clerks of the plant transportation department.

Plants are usually arranged in such ways that the goods may move in one direction from shop to shop so that cross routings may be avoided as much as possible. Large industrial plants must do a great deal of shifting every day and if this work is not arranged so that an even flow of traffic moves in one direction the result is chaos. Movements are anticipated as far as possible to avoid duplication of effort. Movement orders are placed the day before and the time that the cars will be ready the next day is shown in the order as well as the places from which and to which the cars are to be moved. The orders are turned over to the crews several times a day so that their work may be concentrated in different parts of the yard. Yardmasters are used to distribute the work to be done among the crews and to supervise the performance of the work. Movement records are kept by the car record clerks.

Cars are sometimes moved for short distances or in emergencies by locomotive cranes. These moves are regulated in the same way by the plant transportation department. Cranes and crews are requisitioned to load and unload cars by the shipping and receiving departments through the plant transportation office. In this way the cranes may be used to the maximum efficiency wherever needed in the plant.

Weighing Carload Freight

Plant transportation departments usually exercise supervision over the weighing of incoming and outgoing freight. Track scales are used to weigh loaded cars and to light weigh the empty ones so that the weights of the contents may be ascertained for billing and invoicing purposes. The scale master or weighmaster in charge of track scales must determine and record the weights of loaded and empty cars. A number of weight terms are used in transportation parlance that should be defined.

WEIGHT TERMS

1. *Gross weight*.—The total weight of car and its lading or contents.
2. *Tare weight*.—The weight of the empty car.
3. *Net weight*.—The weight of the lading which the car contains; that is, gross weight less tare weight.
4. *Stenciled weight*.—The weight of the empty car as stenciled or marked upon it.
5. *Light weighed*.—The weighing of the empty car.
6. *Minimum weight*.—The least weight of a commodity at which the carrier will apply carload rates, determined by the classification and tariffs.
7. *Estimated weight*.—The weight prescribed for certain commodities shipped in certain kinds of containers by tariffs of the carriers. Estimated weights are used as bases for freight charges in lieu of scale weights.
8. *Shippers weight or agreed weight*.—Weights arbitrarily

used for certain commodities arrived at by agreement between the shipper and the carrier.

Rules Governing Weighing

The rules governing the weighing and reweighing of carload freight are practically uniform throughout the country. Each carrier or group of roads issues its own tariff containing the weighing rules applying on its lines. Each shipper is governed by the rules of the carriers that serve his plant so that he must be acquainted with the rules and practices governing the weighing of freight that are published in the tariffs issued by such carriers.

Scale Supervision

The scales upon which the weight of any shipments are obtained must be tested, maintained, and operated in accordance with the Track Scale Specifications and the Weighing Rules promulgated by the American Railway Association. Only weights determined by such scales are accepted as correct weights on which to compute freight charges. These scales must be operated by competent employees under the proper supervision of plant officers and subject to inspection and tests by representatives of the carriers.

How Cars May Be Weighed

The manner in which weights are to be ascertained is prescribed in the weighing and reweighing tariffs of the carriers. Carload freight should be weighed at point of origin or as near thereto as is practicable. When track scale weights are used for the assessment of freight charges, weighing must be done by or under the supervision of the carriers or their representatives or under properly supervised weight agreements.

Cars may be weighed at rest in the following ways:

When uncoupled and free at both ends, or when coupled

at one end and free at the other end, only at points where the scale rails are level and approach rails level for a distance of 50 feet and when the scales are kept in first class condition.

Cars may be weighed in motion only when uncoupled and free at both ends and alone, upon scales properly designed for weighing in motion, and in charge of a competent weighmaster.

Cars loaded with long material extending from one car to another may be weighed coupled at rest. They may also be weighed coupled in motion on scales of sufficient length to properly weigh together the cars so coupled.

When the actual tare of a car has been ascertained, immediately before loading, it shall be used in lieu of the marked tare, except as provided in the paragraph following.

If a loaded car, upon arrival at destination, is weighed and the actual tare is ascertained after the entire lading of the car has been removed, including all packing and the débris resulting from that lading, it shall be used in lieu of the marked tare. If the car is reloaded by the consignee, actual tare obtained in like manner may be used.

The marked tare should be used to arrive at the net weight of the load, except as provided in the two paragraphs above.

Information Concerning Weighing

The facts surrounding the weighing of carload freight must be recorded in the manner and on the papers prescribed so that the conditions under which the cars were weighed can be ascertained by reference to the railroad shipping papers. The carrier must note all the conditions of weighing of any cars on their scales records, waybills, freight bills, weight certificates, slip bills, transfer records to connecting lines, and on correction sheets.

Rules Governing the Noting of Information

A record must be kept at each track scale, showing the gross, tare (whether actual or stenciled), and net weight; the date and time of weighing; the condition of the weather; a statement as to whether the car was weighed at rest or in motion; whether it was coupled at one or both ends or uncoupled, and when actual tare is used, a statement of the estimated amount of débris in car.

The point at which the car is weighed and the gross, tare, and net weights must be noted in ink or indelible pencil on the regular waybill, slip bill or card bill. When the actual tare is used instead of marked tare it must be specified. The method used in ascertaining the weight of the car must also be shown; that is, whether a railroad scale was used or an estimated or authorized weight provided for by a weighing bureau, a shipper's tariff, or a classification or agreement weight. This information must be shown also on the records of transfers to connecting lines, on correction sheets when they are issued, carried on waybills to destination, and shown on freight bills at destination.

When track scales are equipped with registering or recording devices and when the sticker form of scale tickets are used, such tickets may be used in same manner as provided in the paragraph above. If sufficient space is provided on the stickers, the information shown in the first paragraph must be supplied.

When side cards are provided for the purpose of showing the weights of cars, the proper information must be indorsed upon them.

In case the agent of the carrier at the point of origin receives a request from the consignor for the result of weighing or reweighing, a notation to this effect must be made on the billing that accompanies the car to destination.

When weights are obtained for billing purposes under weight agreements which do not provide for the use of

the gross and tare weights, the gross and tare weights need not be shown, as provided above.

Reweighing

If a carrier assesses freight charges based upon weights which the consignor or consignee does not believe to be correct, arrangements may be made to have the cars reweighed. A charge is assessed by the carrier for reweighing each car if the reweighing is done to verify the charges. The rates for the service vary with different carriers and with the type of weighing service. The precise rates are shown in the weighing tariff issued by the carrier performing the reweighing. These charges for reweighing also vary according to the kind of scales upon which the cars are reweighed. The charges are usually lower if the weighing is done on private scales than when it is done on the scales of the carrier. If, however, after the car is received by the consignee, a discrepancy is shown to exist between the weight of the car when received and the billed weight, the car may be reweighed without any charges being

When Cars May Be Reweighed

The consignor is furnished, if he requests, with the gross, tare, and net weights and with information concerning any changes in weights. Any car may be reweighed under such circumstances at regular tariff charges for reweighing, subject to a readjustment of charges if error is proved beyond the limits of tolerance, as will be discussed later. Cars may also be reweighed if the loadings have been transferred en route, when the cars have met with an accident, or where, for other reasons, there is evidence of loss in transit. They may also be reweighed for the information of the interested carriers and to test the accuracy of previous weighings.

Charges

If a car that contains a commodity that is subject to shrinkage is reweighed, no charge will be made for the service if the billed weight of the car is changed as provided in the following rule governing commodities subject to shrinkage.

Weights of commodities subject to shrinkage in weight or from their inherent nature,—properly obtained at or near point of origin, should not be changed, except as provided for in the tariffs of the carriers. If obvious error is discovered, each case should be dealt with upon its individual merits and a report made to the originating carrier with all the facts.

1. When inbound freight is weighed or reweighed by a switching line, not participating in the freight rate, the regular charges for weighing are assessed, regardless of any variation in weights, in addition to the regular switching charges. If no change is made in billed weights, the charge is made against the party or road requesting weighing; when change is made in billed weight the charge is assessed by the switching line against the road that has delivered the car to it.

2. When carload shipments for which fixed or estimated weights are provided for in classifications and tariffs, car reweighed at the request of the consignor or consignee, charges assessed, regardless of any variations in weights.

3. When carload shipments are billed at minimum carload weights and are reweighed at the request of consignor or consignee, reweighing charges are assessed, unless the variations in the weights increase the freight charges.

Tolerance

Many scales differ in the weights they indicate for the same car and many commodities differ in their weights at different times, due often to shrinkage. The term tolerance, as used by common carriers, may be defined as the difference in weights due to variation in scales or weighing that is permitted without any corrections being made in the billed weights. The amount of tolerance that is allowed by the carrier is 1 per cent of the lading, with a minimum of

500 pounds on all carload freight except ashes, cinders, clay, colomite, gravel, ore, sand, uncut stone, and similar bulky freight loaded in open cars. The tolerance allowed in such commodities is 1 per cent of the lading with a minimum of 1,000 pounds.

When carload freight, the weight of which is not subject to change from its inherent nature, is check-weighed or reweighed en route or at destination, no correction may be made in the billed weight except as is provided below.

If the difference between the original net weight and the weight obtained by reweighing does not exceed the tolerance provided in the rule, the first weight is changed. If the difference exceeds the tolerance, the car is weighed a third time, if this is practicable. In case the third weighing confirms the original weight within the tolerance no change is made in the billing. Where the original weight cannot be verified, the lower of the second or third weights is used when the difference between the second and third weights does not exceed tolerance. In deciding between two weights, each of which has been obtained on track scales, all of the conditions under which both the weighings were done are taken into consideration. The kind of scales, their condition, how recently they have been tested, the method of weighing, whether the car was weighed at rest or in motion, whether coupled or uncoupled, whether the actual or stenciled tare was used, the time of weighing, weather conditions, and the reliability of the weigher are compared. Precedence is given to the weight obtained under the best conditions.

The consignor or consignee is permitted to show the actual weight of any carload shipment either by means of a shipper's authenticated invoice, by weighing the entire load on platform scales, or by weighing a portion of uniform- or standard-weight articles not less than 10 per cent of the lading. The weighing must be performed under the

supervision of the carrier, and the total weight, including all blocking, packing, and débris, is taken into consideration. The actual weight determined in these ways is used to determine the freight charges, subject to the terms of a weight agreement if one is applicable, if the difference between the billed weight and the actual weight exceeds the tolerance.

Release of Empty Cars

Empty cars that are not needed for loading outbound shipments are moved from the places within the plant where they have been unloaded and are delivered at the interchange track by the plant's locomotives and train crews. Car-release notices are sent by the car clerk of the receiving department or by the head of a department for whom the cars have been unloaded, notifying the plant transportation department that the cars have been unloaded and are no longer needed. These notices are often sent before the cars have been actually unloaded if the sender is certain that the cars can be completely unloaded before the yard crew comes to take them away.

If equipment of the kind and size needed for loading is about to be released by the industry, the car clerk of the plant transportation bureau uses these cars to fill the requisitions and notifies the carrier that the cars have been unloaded and released. As many of these empty cars as are needed are then ordered of the carrier for use in outbound shipping. The empty cars are then drilled by the plant's own motive power from the places where they have been unloaded to the spots where they are to be loaded.

Yards are checked daily or even more frequently by the car clerks of the plant transportation departments to determine the exact location and the stage of loading or unloading of each car. Empty cars that have not been released are checked to ascertain if they are to be used for

loading and, if not, are immediately released. Loaded cars that have not been unloaded promptly are called to the attention of the receiving department so as to be sure they have not been overlooked. Only by continuous vigilance of this kind can demurrage charges be kept within bounds. The shipping, receiving, and plant transportation departments, by acting as checks upon one another, can insure efficiency in car service and reduce and eliminate demurrage charges. A fair test of the success of any industrial traffic department that is charged with the responsibility of administering the shipping, receiving, and plant transportation facilities of an industry, is the amount of its demurrage bills. One of the strongest arguments in favor of placing these functions under the control of a traffic manager is the opportunity it gives to such an executive to coördinate the work of these three departments into a harmonious working organization.

Terminal Switching Allowances

The carriers serving industrial plants that are equipped with rails and motive power to perform their own plant switching, sometimes arrange with such industries to perform the spotting of inbound cars for the account of the delivering carriers. Carriers are obligated to make deliveries of cars at any reasonable points within the plant where the cars are wanted and may perform this spotting service with their own locomotives. Plant transportation may, with the consent of the railroads serving the industry, receive compensation for the service. Industries cannot compel the delivering railroads to make allowances for spotting cars, for the carriers always have the option of performing the service themselves.

The Interstate Commerce Commission has repeatedly denied the right of private plant facilities to share in the divisions or receive allowances out of through rates charged

by the line carriers for transportation, while it has allowed the carriers to divide such rates with common-carrier industrial railroads and tap lines. In a series of cases extending over a period of twelve years, the Commission has steadfastly disapproved of division of rates, *per diem* reclaim allowances, and remission of demurrage charges by the line carriers with the private plant facilities, thus differentiating them from the common carriers, industrial railways, and tap lines.⁵

The Supreme Court decision in the Tap Line Case decided that tap lines were common carriers of proprietary as well as nonproprietary traffic and as such were entitled to participate in joint rates with other common carriers, such rates, however, to be subject to the control of the Interstate Commerce Commission. The test of whether or not an industrial line is or is not a common carrier is not the extent to which the road is used. "It is the right of the public to use the roads' facilities and to demand service rather than the extent of its business, which is the real criterion determinative of its character," said the Supreme Court in this case. The Commission has applied this decision to industrial lines. In the Industrial Railways Case of November 2, 1914 (32 I.C.C. 129), the Commission decided that railroads could reestablish allowances, divisions, demurrage, or *per diem* arrangements which it had previously ordered canceled as forms of concealed rebates, "only in instances in which the transaction is bona fide and in which it is clearly lawful and proper. Each case must be judged by its own facts and merits. Each of the industrial railways is or is not a common carrier. If it is a common carrier it is entitled to all the rights and subject to all of

⁵See Industrial Railways Case, January 20, 1924, 29 I. C. C. 212; Tap Line Case, I. and S. Docket No. 11, April 23, 1912; 31 I. C. C. 490; also 34 I. C. C. 596; 41 I. C. C. 596; 53 I. C. C. 104; 58 I. C. C. 558; 61 I. C. C. 556.

the limitations provided in the act [the Act to Regulate Commerce of 1887, as amended].”

The Commission has defined an industrial railroad as a

short line, constructed primarily to serve the particular plant or industry in the general interest of which it is owned and operated. It consists of the tracks connecting the various factories, warehouses and other buildings of the industry with one another, and ordinarily has a connection with one or more adjacent trunk lines by means of a track leading from the plant to their rights of way (Interchange Tracks). It serves the industry by receiving its inbound shipments of raw materials from the trunk lines at agreed interchange points, distributing them among the various buildings according to the requirements of the manufacturing operations, and by taking its finished products from the plant to the trunk lines; it is also often in a position to effect all the necessary movements of materials and practically finished products from building to building within the plant.

If such lines hold themselves out to carry for others they are common carriers, if not they are merely plant facilities.

Allowance Tariffs

The division of rates and arrangements between common-carrier industrial and tap lines and the railroads do not come within the purview of this chapter as they are inter-railroad matters. The allowances paid by carriers to plant transportation facilities are matters in which industrial traffic managers are vitally concerned. Railroad companies frequently do not care to exercise their privilege of spotting cars within industrial plants. In such cases arrangements are made with the industries to perform this service themselves for the railroads, and tariffs are published providing for allowances to be paid on all carload revenue-paying traffic and on ferry cars containing more than a specified amount of revenue less-than-carload freight to or from the industries.

The allowances guarantee the payment by the carriers, out of the rates in force to and from the plants to points on or reached by the lines of the carriers, of the actual cost to the industries of performing the service, provided such costs do not exceed an agreed upon amount per car. Monthly bills are computed by the industries and submitted to the carriers showing the cost per car, the initial and numbers of the cars spotted, the dates of performing the services, and the total monthly cost. Cars that have been hauled under switching rates and shipments of low-grade commodities that pay unusually low rates, such as slag, ashes, or other refuse materials, are usually excluded from the arrangement. Shipments of coal, coke, and ex-lake iron ore are also commonly excluded from the general arrangement and either covered by another special allowance tariff or made the subjects of other arrangements.

Articles that require two or more cars for transportation on account of their excessive lengths are dealt with separately. The allowance provided for carloads is applied to the first car of the series and each additional car is allowed for at a reduced maximum rate, usually 50 per cent of the regular maximum rate per car. Thus if a shipment requires four cars to transport and the switching allowance maximum rate is \$1.10 per car, that much will be the maximum amount allowed for the first car with allowances of \$0.55 per car for the other free cars, a total of \$2.75 for the series.

Cars containing overflow freight are usually allowed for at a maximum rate of 50 per cent of the maximum carload allowance.

Demurrage Supervision

The National Car Demurrage and Charges Code provides that all cars of railroad or private ownership that are held for or by consignors or consignees for loading, unloading,

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forwarding directions, or for any other purpose are subject to charges for such detention.⁶

The uniform tariff exempts from demurrage charges only such cars as are:

1. Under load with railroad company material for the use of and consigned to the railroad in whose possession the cars are held,
2. Under load with livestock
3. Private cars on private tracks when the ownership of the car and the track is the same
4. Empty private cars stored on railroad or private tracks, including such cars sent by the owner to a shipper for loading, provided the cars have not been placed or tendered for loading on the orders of a shipper
5. Handled in the sugar cane service on Louisiana intrastate traffic only
6. Placed for loading or unloading logs on designated tap lines or cars of coal and coke at Russell, Ky., on the C. & O. Ry., that are governed by special tariffs of those carriers

Forty-eight hours of free time are allowed for loading and unloading cars by the demurrage rules. Within this period bills of lading covering order shipments must be surrendered, freight charges must be paid if required, and "turn-over" orders must be given if the cars are to be delivered to others than the original consignees.

Twenty-four hours' free time are allowed on cars held for reconsignment, diversion, or reshipment, or held in transit on order of the consignor, consignee, or owner; those held under tariff regulations for surrender of bill of lading or payment of lawful freight charges when they are destined for delivery to or for forwarding by a connecting line; cars held in transit and placed for inspection and grading of contents; cars held to complete loading or to

⁶ National Car Demurrage Rules and Charges, Freight Tariff No. 4 E, I. C. C. No. 1581, effective January 1, 1925; B. T. Jones, Agent, American Railway Association, Chicago, Ill.

partly unload, and cars containing freight in bond for U. S. Customs entry and government inspection.

Time is computed generally from the first 7 A.M. after a notice of arrival has been sent or given to the consignee or to the party entitled to receive the notice, and after the car has been placed. Industries that have their own private tracks usually need no notices of the arrival of cars unless the cars cannot be actually placed because of conditions beyond the control of the delivering carriers.

The uniform tariff provides for time to be computed from the first 7 A.M. after cars have been actually or constructively placed on the interchange tracks of industrial plants that perform switching service for themselves or for other parties. This time continues to run until the cars are returned to the same or other interchange tracks connecting the plant facilities with the rails of the carriers. Cars that are actually delivered are charged for, beginning at 7 A.M. if they are delivered before that hour, the time of delivery being determined by the precise time the engine of the carrier cuts the cars loose on the tracks of the industries.

When cars consigned or ordered to be delivered to industrial interchange tracks cannot be placed on account of the inability of the consignee to receive them or because of any other conditions attributable to the consignee, they are held by the carriers at destination or, if they cannot be reasonably accommodated there, at the nearest available hold points. Written notices that the cars are held and that the railroad is unable to deliver the cars are sent to the consignee. This is considered constructive placement, and demurrage charges are assessed beginning the first 7 A.M. after the notices have been sent or given.

Cars delivered to industrial tracks for loading are considered placed when they are actually placed or held on the orders of the shippers. If cars to be loaded are held by the carriers because of their inability to place the cars

due to causes beyond their control, notices to this effect are sent or given the consignors. Such cars are considered constructively placed. Demurrage charges begin to accrue the first seven o'clock after placement notices have been sent, or subject to forty-eight hours allowance for free time.

Empty cars that are placed by the carriers on orders of industrial establishments and not used in transporting freight are charged demurrage from the time they are actually or constructively placed until they are released without any allowances for free time. If the cars have been appropriated for use without being ordered, the acts of appropriation are considered as orders and the cars are considered placed at the time of appropriation.

Demurrage is universally charged, except on cars loaded with explosives and other dangerous articles, cars held on a few designated narrow-gauge roads, and cars that are subject to the average agreements, at the rate of \$2.00 per day for the first four days, after the expiration of free time, and \$5.00 per day for each succeeding day. No demurrage is charged, however, for the detention of cars due solely to the following causes:

1. *Weather interference.* When the condition of the weather during any part of the free time is such as to make it impossible for men or teams to work at loading or unloading, or impossible to place freight in cars or move it from cars without serious injury to the freight, or when, because of high water or snow drifts, it is impossible during the prescribed free time to get to the cars for loading or unloading, the free time is extended until a total of forty-eight hours, or twenty-four hours as the case may be, free from interference, has been allowed. No such additional time is allowed, however, unless claims, stating fully the conditions that prevented loading or unloading within the period of free time, are presented in writing to the agents

of the carriers assessing the charges, within thirty days after the dates on which the demurrage bills are presented. The extensions of free time on account of high water or snow drifts apply to other than public delivery tracks (industrial tracks and other private tracks) only where there is disability of the carrier.

When, at time of actual placement, the lading is frozen so as to require heating, thawing, or loosening to unload, the free time allowed is extended forty-eight hours, making a total of ninety-six hours free time, provided the consignees shall, within forty-eight hours after actual placement, serve upon the railroad's agents written statements that the lading was in such frozen condition at time of actual placement.

2. *Bunching.* (a) Cars for loading. When, by reason of delays or irregularities in filling orders, cars are bunched and placed for loading in accumulated numbers in excess of daily placing as ordered, shippers are allowed such free time for loading as they would have been entitled to had the cars been placed for loading as ordered.

(b) Cars for unloading or reconsigning. When, as the result of the act or neglect of any carrier, cars originating at the same point, moving via the same route, and consigned to one consignee at one point, are bunched, or when cars originating at different points and transported via the same route from an intermediate common point to destination are bunched after arriving at the common point (in which event the dates of arrival of the cars at common point will govern in determining the bunching instead of the dates of shipments) and are tendered for delivery by the railroad in accumulated number in excess of daily shipments, consignees are allowed such free time as they would have been entitled to had the cars not been bunched. When any car is released before the expiration of such free time, the free time on the next car will be computed from the

first 7 A.M. following such release. No allowances are made unless claims are presented in writing to the railroads' agents within thirty days after the dates on which bills for demurrage are rendered. These bills must be supported by the receipted bill as evidence of payment, of the demurrage as originally charged and a statement showing date and point of shipment of each car involved in the bunching claim. Under this rule, cars moving from different points and or via different routes to destination and arriving on different dates are considered bunched if they are tendered for delivery on one day, and such free time is allowed as the consignee would have been entitled to had the cars been placed or tendered for delivery in the order of their arrival.

3. *Demand for overcharge.* When agents of the railroads demand the payment of transportation charges in excess of those provided for by authorized tariffs.

4. *Delayed or improper notices of arrivals.*

5. *Error of any railroad that prevents proper tender or delivery.* Demurrage in such cases is charged on the basis of the amount that would have been charged but for the error.

6. *Delay by U. S. Customs.* Additional free time is allowed equal to the amount lost by reason of such delay.

Average Agreements

Charges for the detention of all cars subject to demurrage that are held for loading or unloading may be calculated on the basis of the average time of detention of all such cars released during each calendar month.

One credit is allowed for each car released within the first twenty-four hours of free time. After the expiration of forty-eight hours of free time or ninety-six hours in case of cars the lading of which is frozen so as to require thawing, one debit per car per day or fraction of a day is

charged for the first four days. After four debits have accrued against a car, a charge of \$5.00 per day or fraction of a day is charged for subsequent detention. This charge is applied on all subsequent Sundays and holidays beyond the first four days of demurrage.

No more than one credit can be earned by any one car and no more than four credits may be used in canceling debits on any car.

Credits earned on cars held for loading may not be used in canceling debits on cars held for unloading. Credits earned on cars held for unloading cannot be used to offset debits charged against cars held for loading.

Credits cannot be earned by private cars but debits charged on such private cars, while under constructive placement, may be offset by credits earned on other cars.

At the end of each calendar month, the total number of credits is deducted from the total number of debits and \$2.00 per debit is charged for the remainder. If the credits equal or exceed the debits, no charge is made for the detention of the cars. No payments are made, however, by the railroads on account of such excess of credits. The credits in excess of the debits of any one month may not be considered in computing the average detention of another month.

Parties who enter into average agreements are not entitled to include cars for reconsignment, diversion, or reshipment, or those held in transit on orders or for surrender of bill of lading, those held to complete loading or unloading, those held for government inspection, and those ordered but not used in transportation service, or private cars. Neither are they entitled to cancelation or refund of demurrage charges because of weather interference or bunching, except where bunching is caused by a strike of carrier's employees, or where shipments of coal, withheld

by the carrier to protect its fuel supply, are subsequently delivered to consignee in accumulated numbers.

Parties who enter into average agreements are usually required to give sufficient security to the railroads to insure the payment of balances against them at the end of each month.

An average agreement must include all cars loaded or unloaded within the jurisdiction of the same station, except that, when desired, separate agreements may be entered into for each plant or yard within the jurisdiction of the same station. In no case can the cars loaded or unloaded within the jurisdiction of two or more stations be combined in one average agreement. Cars loaded or unloaded by more than one consignor or consignee may not be combined in one average agreement, except that cars consigned, re-consigned, or ordered to a public elevator, warehouse, or cotton compress serving various parties may be combined in one average agreement.

FIG. 15. AVERAGE DEMURRAGE AGREEMENT

Prescribed by National Car Demurrage Rules and Charges, Freight Tariff No. 4 E, American Railway Association Traffic Bureau.

AGREEMENT

.....Railroad
 Being fully acquainted with the terms, conditions and effect of the average basis for settling for detention to cars, as set forth in, being the car demurrage rules governing at all stations and sidings on the lines of said railroad, except as shown in said tariff, and being desirous of availing (myself or ourselves) of this alternate method of settlement (I or we) do expressly agree to and with the Railroad that, with respect to all cars which may during the continuance of this agreement, be handled for (my or our) account at (Station) (I or we) will fully observe and comply with all the terms and conditions of said rules as they are now published, or may hereafter be lawfully modified by duly published tariffs, and will make prompt payment of all demur-

rage charges accruing thereunder in accordance with the average basis, as therein established or as hereafter lawfully modified by duly published tariffs.

This agreement to be effective on and after the day of 19..., and to continue until termination, by written notice from either party to the other, which notice shall become effective on the first day of the month succeeding that in which it is given.

Approved and accepted 19..., by and on behalf of the above named railroad by

Auditing of Demurrage Statements

The records collected by the yard clerks showing the time cars were detained for loading and unloading are compared with the demurrage statements rendered by the carriers before the bills are paid. Reasons for any delays are noted and notations as to weather interference or other cause of delay for which claims for relief from demurrage charges may be made are shown in the reports of the yard clerks. After the statements of the carriers are checked for accuracy by clerks of the yard transportation department, they are usually sent for final verification to the auditors of the traffic department. After a complete check has again been made and differences have been reconciled, the statements are passed for payment.

The function of the plant transportation department is to watch cars in the yard carefully so that none may be held longer than is necessary and to check the facts as to the time and date of the arrival and release of every car so that demurrage charges may be properly supervised.

Custody and Maintenance of Equipment

The plant transportation department is usually responsible for the custody and maintenance of the locomotives, cranes, freight cars, and truckage used by the industry and sometimes for the actual repair work.

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Engine hostlers are found in the larger industries as employees of the plant transportation department. These men attend to the locomotives when they are not in actual use, cleaning fires, oiling and generally grooming the engines for service. The engineers and hostlers report such defects as they find in the locomotives to the plant transportation offices. Mechanics of the general mechanical departments usually attend to important repair work although minor mechanical adjustments and emergency repairs may be made by employees of the plant transportation department.

Fuel and other supplies of the kind required for the use of locomotives and cranes are requisitioned by the supply clerk of the department through the purchasing department of the company. These clerks are responsible for keeping the supplies of coal, fuel and lubricating oil, spare parts, waste, and similar articles in stock for use as needed. They not only place the requisitions but follow them up to see that the goods are received in time and arrange to have them stored so they will be readily accessible when they are needed. Requisitions for materials and supplies are made of the storeroom from time to time.

The condition of the freight cars is inspected regularly by car inspectors. All inbound and outbound cars of the trunk line carriers as well as the private freight cars of the industry are inspected for defects which tend to make the cars unfit or unsafe for use. Cars that have been ordered for loading are returned to the carriers if they are found to be unfit. Cars that have been unloaded and are to be used to make outbound shipments are inspected before they are unloaded, and are rejected if unfit to carry goods.

Repairs are recommended by the inspectors to be made to such of the industry's cars as are found to be defective, minor repairs and adjustments being made by repair men of the plant transportation department while major repairs

are made in the shops of the plant by the regular machinists, carpenters, and other workers of the company's mechanical departments.

The condition of rails, ties, ballast, switches, and cross-overs is inspected rigidly by inspectors of the plant transportation department. Rails are realigned or relaid, ties replaced, ballast replaced, switches and crossovers are cleaned and kept in condition by trackmen of the plant transportation department in many industries, while in other establishments the actual work is done by men of the plant maintenance, works, or construction departments, under the supervision of the plant transportation department.

Large industrial-plant facilities are operated and maintained, in many instances, like small railroads and have operating, maintenance of way, and equipment organizations similar except in size to the corresponding departments of short-line rail carriers. Smaller plant transportation facilities have no such elaborately subdivided organizations but are responsible for the management of plant transportation equipment, although the actual repair and maintenance work is often performed by mechanics and laborers of other plant departments.

CHAPTER VI

LOCAL MOTOR TRANSPORT MANAGEMENT

The Traffic Manager and Local Transportation

The connecting link between the railroad and steamship facilities and the industrial plant or commercial establishments is the motor transport service, attending to the delivery of outbound less-than-carload shipments to the railroad freight stations and both carload and less-than-carload freight to the steamship piers. In the opposite direction, less-than-carload shipments must be hauled from the railroad stations, and carloads and L.C.L. shipments from the steamship docks. If the concerns have no track connections with rail lines, motor or horse-drawn vehicles are used to convey inbound carload shipments from, and outbound freight to, the team tracks of the carriers. Only the traffic carried by the express and motor transportation companies is carried to or from the receiving and shipping platforms of the industries in this country.

Goods must not only be hauled to and from the receiving and delivering stations of the carriers but local freight to or from industries in the immediate vicinity of the factory or business house must be hauled, in many instances, by vehicles owned, operated, or controlled by those in charge of the transportation affairs of industrial or commercial organizations.

The problem of local transport management is closely connected with other phases of traffic and transportation work. The success of the whole program of traffic control and management may be jeopardized if this important link

is not supervised, so that goods are delivered to customers and the carriers and received from the shippers and the carriers efficiently and economically.

Methods of Supervising Motor Transportation

Several methods of controlling motor transportation service are to be found among representative industries. In the first place, many concerns do not own any motor trucks but hire the services of motor haulage companies or teamsters to handle their traffic. Sometimes a time contract is entered into with a hauling contractor to handle all inbound and outbound shipments, usually on an annual or monthly basis, and in other cases the services of trucks or teams are hired as need for their use arises. Concerns hiring services in this fashion may use one trucking concern exclusively or many divide their business among a number. It is difficult to generalize in this matter for the practice followed is determined by the number and reliability of the truck or team operators available, their rates, the volume and kind of traffic to be handled, and the policy of the company hiring the services. A second plan is more frequently found in larger business establishments, that of ownership of motor-transportation facilities. Trucks and trailers are owned by the company and operated by their own employees. In some cases a separate department takes charge of motor transportation while in others the motor trucks are operated by members of a subdivision of the traffic department and their work supervised by the traffic manager.

There are those who favor all of these methods of supplying and supervising motor truck transportation and each plan has its merits and demerits. One fact, however, is clear. The duty of those in charge of all phases of the traffic work of industrial organizations is to keep the flow of raw materials and supplies into the plant, of products in the process of manufacture through the plant, and of

finished products from the factory, in constant motion without congestion at any point. Any plan of management which accomplishes this result is a valuable plan.

Motor transportation is usually a supplementary service to the rail-and-water facilities except in cases where the sources of supply or markets are so close at hand that motor transportation may be used for the whole transportation process or the urgency of the need for the goods is sufficient to justify the use of motors for comparatively long hauls. Whether the service is purely a terminal service or more, it is a vital part of the transportation service and as such must be carefully and efficiently supervised if the industry is to have the benefit of adequate transportation at reasonable rates.

Percival White in his book, *Motor Transportation of Merchandise and Passengers*, stresses this point and says further:

The manufacturer, generally speaking, fails to realize that transportation, as applied to his problems, is a science. He has frequently failed to take into consideration the operating economies which it is possible to effect in his transportation problems through proper choice of equipment, adequate records, carefully selected drivers. The manufacturer would be shocked if it were intimated that his transportation costs were unreasonably high, yet if a fraction of the time were given to this vital function that is given to the proper routing of, let us say, a small bit of steel through some manufacturing process, the result would be astonishing.¹

Industrial concerns, whether they hire motor transportation on a time-contract basis or as the need for service arises, or own and operate their own trucks, should have a man in charge of the work who is not only familiar with motor transportation but with all branches of traffic and transportation service as well. Unless there are very good

¹ Percival White, *Motor Transportation of Merchandise and Passengers* (McGraw-Hill, New York, 1923), p. 198.

reasons why this work should be supervised by an independent department head, the traffic manager should attend to the supervision of this work as an important part of his general traffic and transportation supervisory duties.

The Instruction and Control of Chauffeurs

The receiving of less-than-carload shipments at railroad stations and steamship piers is a specific instance of the value of a close working relationship between the members of the plant's motor transport force and the traffic department.

The chauffeurs or drivers of the company's trucks or teams act as agents of their principal in receiving and signing receipts for freight at railroad stations and steamship piers. Their receipt for goods in good condition is binding upon their employer, as is their indorsement of released valuation clauses of bills of lading. If goods are signed for as being in good condition by such agents, the presumption is that the freight has been turned over to the representatives in good condition. If damage or loss is found to have been suffered when the freight is received and unpacked, it must be proved that such loss or damage was not due to the acts of the chauffeurs or drivers in hauling the goods from the station of the carrier to the receiving room of the consignee.

Truckmen, therefore, should be instructed by the traffic manager so that they may fully appreciate their responsibilities in receiving freight from and delivering it to the agents of the carriers. In this way only can the interests of their employer be protected.

Standard instructions are issued by a number of industrial traffic managers. The truckmen are required to refuse to accept freight which is obviously damaged to such an extent as to render it worthless. These cases of complete damage are reported by the truckmen to their superior and

a representative of the company is usually sent to the freight station to make a final inspection. If the goods are found to be worthless, this fact is reported to the traffic manager so that a claim for the full value of the goods may be filed against the carrier.

The truckmen are instructed to examine each package carefully and to count the number of pieces before signing a receipt. If the contents of the containers rattle as though they were damaged, if the packages are crushed or broken, or if the condition of any of the containers indicates that the contents are damaged, the truckmen are instructed to have the packages opened and examined before accepting them. When there is reason to believe the goods are not in perfect condition, the carrier's agents are required to make such inspections while the goods are still in their possession. The nature and extent of the loss or damage may then be learned and an exact description of the breakage or shortage indorsed upon the delivery receipt, which is signed by the truckmen, and upon the paid freight bill, which is signed by the agent of the carrier. The settlement of claims, based upon such records, is made easy.

Shipments that have been signed for by truckmen as being in good condition are sometimes found, when unpacked, to have been damaged or pilfered. The truckmen, in such cases, are required to sign statements as to the circumstances surrounding delivery, condition of goods, how the goods were protected against the weather and thieves, and other pertinent facts. These statements are used, if necessary, to support concealed loss and damage claims.

Outbound shipments that are to be delivered by trucks to railroad stations or steamship docks are protected by covers in wet weather so that notations indicating that the packages were received wet may not be made by the agents of the carriers. Truckmen are instructed not to accept such

indorsements upon bills of lading if the condition of the containers does not justify the statements. It is very difficult to collect claims for water damage if such notations are indorsed upon bills of lading. The liability of the carriers for such damage may be avoided if it can be proved by the bill of lading receipts that the goods were received in wet containers. The claimants cannot prove that the damage of which complaint is made did not occur before the goods were delivered to the carriers.

The close connection between local motor transportation and other traffic and transportation matters is stressed by many students of transportation problems, and the need for careful coördination of motor-transportation service with other branches of industrial transportation is borne out by the experience of many industrial concerns.

White, in his work referred to previously, is very emphatic upon this point. He says:

Every manufacturing concern, even one operating but three or four trucks, should have a traffic superintendent in charge. . . . The great argument for centralized management of trucks is the opportunity this allows the traffic manager of employing each truck in the most profitable manner. He is in a position to judge whether each transportation unit is doing the required work in the best possible way.³

Motor Truck Routing

A motor truck, whether it is owned by the industry or hired from a trucking company, must be kept busy if it is to earn its expense for the industry. The interest upon the initial cost of the equipment, together with the wages of the driver and helper, depreciation, and overhead costs, are fixed charges which are about the same whether the truck is used economically, so as to get maximum service from it, or whether it is allowed to remain idle. The truck or fleet

³ *Ibid.*, p. 203.

of trucks owned or hired by industrial establishments should not be dispatched with partial loads or allowed to wait idly for loads at the factories or railway stations. The results of indifferent use of trucks are seen not only in high cartage costs per pound of freight to the industry, but in increasing street congestion in the already overcrowded terminal districts. Many trucks are required to perform comparatively little work.

A special committee appointed by the President of the Chamber of Commerce of the United States reported, November 3, 1923, that:

Under the prevailing system of miscellaneous cartage which, with very few exceptions, is in use in all terminal areas in the United States, each trader sends to the terminal station his own or a hired vehicle to deliver or receive his particular freight. As a consequence the streets leading to the terminal station are burdened with innumerable trucks and wagons containing only partial loads. The greater number of these vehicles are drawn by horses and contribute to the congestion far more than would the same number of motor trucks.

The substitution of an organized trucking system for the miscellaneous haphazard service now employed for station work would greatly increase the load efficiency of vehicles, thus reducing the number on the streets. It would speed up street traffic and reduce the danger to pedestrians."

Before a comprehensive program of motorization for terminal transportation is put through, much can be done by individual industries to relieve congestion and to reduce their own trucking costs by systematic routing of their trucks.

Each industrial plant has its own special problems which arise out of the character of the freight to be handled, its volume and weight per unit, the amount of freight to be

"Relations of Highways and Motor Transport to Other Transportation Agencies," Special Committee IV, U. S. Chamber of Commerce, Washington, D. C., 1923, p. 15.

handled annually, the daily, weekly, monthly, or seasonal variations in quantity, the locations of railroad station, steamship docks, factories or warehouses of suppliers and customers in the local district, the arrangement of loading and unloading platforms, and other freight facilities within the plant, and the type of motor equipment used or to be used. All these factors emphasize the importance of careful attention being given by competent industrial traffic managers to the problems of each individual industry. It is obviously impossible, therefore, to determine a specific routing system which would be fully satisfactory for all industries. There are, however, certain principles to be observed by all industries which seek to manage their local motor transportation units effectively.

The first step in routing local motor freight carriers is detailed study of the locations of the depots of the transportation facilities serving the terminal area in which the industry is located. The freight stations, team delivery tracks, yards and transfer stations of the railroads, the docks and receiving and delivering platforms of water transportation companies, the stations of electric railway lines, and the express stations and depots used by motor freight carriers are located and placed upon maps of the city or district.

The factories, warehouses, and shipping platforms of concerns in the immediate vicinity of which supplies are purchased or goods sold are also indicated upon such maps.

The factory and its yards, warehouses, and storage areas in the district are shown; the distances, via the most direct usable routes, from the factory to the transportation depots and the establishments of suppliers and customers are calculated.

Highways suitable and available for motor trucks are determined upon and located upon the maps to be used in routing. The condition of the surfaces of these roads or

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streets, the amount of traffic upon them, and speed and weight restrictions are studied. Changes in the roads used are made from time to time as conditions make such changes advisable.

Large maps show these points and routes, and copies are kept in the general traffic office and in the office from which the trucks are routed in order that those charged with the supervision as well as those doing detailed work may be supplied with the same data.

After the transportation maps have been prepared and the routes and distances from the factory to the points to which goods must be delivered, or from which received, have been analyzed, the next step is to divide into zones or routes the territory to be served by the trucks.

A division of the territory into zones, each of which is to be served by one or several trucks, is obviously not an easy matter. Zoning tends, it is true, to eliminate cross routing, but if the boundaries of the zones are rigidly fixed, much of this benefit is sacrificed. Calls for service at points close to the boundaries of a zone may often be handled more economically by a truck having work to do in an adjacent zone than by a truck working in another part of the zone. Again emergency work may be handled without regard to zones in certain cases. Rigid zoning, while it has many advantages, lacks elasticity.

One successful plan retains the desirable features of zoning without using the system entirely. Zones are designated within which the normal routine pick-up and delivery services are performed either by horse-drawn vehicles, electric trucks, or gasoline trucks. Horse drays are used for short-distance hauling in congested areas, light electrics are used for local delivery service in less congested districts, while gasoline motors are used for heavy duty long-distance service. Each vehicle has its normal zone but routes are changed from day to day so that variations

in the volume and character of the freight to be handled may not unduly burden the vehicles assigned to one zone while the work of those in other zones is lightened. Trucks or teams are routed into zones normally served by other vehicles so that the work is evenly distributed and the carrying capacity of each vehicle is used most efficiently. A large-scale wall map of the terminal district and surrounding territory is mounted on a soft wooden back so that colored push pins may indicate stops to be made. The map is divided into zones which are normally served by a truck assigned to the district, and the boundaries of the zones are indicated by different colored lines. Each truck is assigned a color or a combination of colors and the stops for pick-up or delivery of freight are indicated by placing pins of the assigned colors on the spots the calls are to be made. Black pins indicate the stops to be made by one truck; blue, those to be made by a second, and so on. A black pin placed in the zone area ordinarily served by the truck to which the green pin is assigned indicates that the truck represented by the black pin is to include that stop in its route for that day.

The third step in routing control is the adoption of a system of truck dispatching that will insure the continuous use of all the trucks without undue rush work, overtime, or idle time. This is an exceedingly difficult task, especially when the amount of work fluctuates from day to day so that the trucks cannot be assigned to definite daily routes. The truck dispatcher must at all times be in touch with all of the trucks under his control so that he may know when they should be available for other work. To accomplish this result, orders are prepared in the dispatcher's office which indicate the kind and amount of freight to be carried, the truck to do the work, where the freight is to be picked up or delivered, the time the work is to be done, and the time the truck is to be back at the plant.

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A dispatching board in the shipping room is sometimes used for the posting of copies of these orders so that those preparing freight for shipment may know when trucks are expected back. The chauffeurs to whom the orders are indicated return them to the dispatching office after the work has been completed and report the distance run and the time of return so that the actual time required may be compared with the estimated time. Delays are required to be explained by the drivers so that a record can be kept of the causes of delay, with the end in view of eliminating them.

While the trucks are away, other loads are collected for them so that the trucks are not kept idly waiting for freight. Stops for pick-ups are assigned to the trucks as they go out with loads, so that as nearly as possible the equipment is kept busy with loads in both directions. If trailers or semitrailers are used, the amount of idle time may be even further reduced by loading them while the power vehicle is away and by having the trailers loaded and ready to be hauled away as soon as the truck reports back with its inbound load. Idle time, the one weak spot in motor transportation efficiency, has been greatly reduced in many industries by orderly dispatching.

Performance Records

The actual service done by each truck and driver must be recorded as bases upon which to check the effectiveness of each unit of motor equipment and of each man employed in local motor transportation service.

Daily reports are required of truck operators by many industrial concerns which operate fleets of trucks and even by those which operate only a few. The National Standard Truck Cost System has been evolved by the Truck Owners' Conference, Inc., of Chicago to facilitate accurate, complete, and well arranged records which can be used for the com-

pilation of cost data. Two record sheets are made up daily, one by the truck master or driver in charge of each truck and another by the dispatcher or clerk in the traffic department who is in charge of records and operating-cost data.

The driver's daily service record shows the number of the trips, the time of leaving garage or platform, the stops for delivery or pick-up of freight, the weight of goods hauled out and in, the time of reporting and release from work, the mileage reading at beginning and end of the day's work, fuel units and lubrication consumed, the time taken for meals, and the helper or helpers used. If a trailer is used in any part of the day's work, a record is made of that fact as well as a record of the causes of any delays or accidents, the weather and road conditions, repairs made away from the plant, and the amount and occasion of any expenses.

The data from the reports of the truck drivers is summarized daily by the clerk or accountant in charge of costs. The operating and cost records are analyzed so that comparison may be made between the efficiency of the trucks comprising the fleet and of the drivers in charge of them. Allowance must be made in such studies for irregularities of service due to causes beyond the control of the operators. Weather and road conditions, unavoidable delays and accidents must be taken into consideration. Delays, breakdowns, and idle truck time due to acts or errors of employees in other departments are often revealed in analyzing the reports of the drivers and are sought to be corrected.

Cost of operation per day, per mile, and per unit of freight handled and costs per unit of weight per mile are readily calculated from the daily reports so that comparisons may be made between the expense of transporting goods by motor and by other available means. Finally, monthly cost accounts which include fixed as well as operating costs are made up. The investment in motor equip-

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DAILY SERVICE RECORD, TRUCK No. — *

(To be turned in daily)

No. of Trip	Trip Time		Delivery or Break-up Stops	Load Units		Helper Used	Trailer Used	Month Day Year
	Leave	Return		Out	In			
1....								Accepted for work at.
2....								Released from work at.
3....								Mileage reading finish.
4....								Mileage reading start.
5....								Mileage to-day.
6....								Gasoline or K.W.H.
7....								Cylinder oil, pints.
8....								Lunch time, start.
9....								Lunch time, finish.
10....								

DAILY TOTAL.

DRIVER

*Adapted from Daily Service Record, National Standard Truck Cost System, Truck Owners' Conference, Inc., Chicago, Ill.

FIG. 16. TRUCK SERVICE RECORD

ment, carrying charges, license fees, garage expenses, taxes, insurance, depreciation, and overhead expenses are computed and actual total costs arrived at accurately.

An exhaustive analysis of the systems of motor truck costs accounting is beyond the scope of the present volume. Suffice it to say that the science of truck cost keeping is in

the making, and each industrial motor truck operator has a number of systems to select from, all of which seek to establish accurate and adequate records of the costs of:

1. Fuel
2. Lubrication
3. Tires
4. Batteries
5. Interest
6. Taxes
7. Licenses
8. Garage
9. Repairs
10. Insurance
11. Depreciation
12. Maintenance
13. Wages
14. Overhead

Annual records may be kept of:

1. Tons hauled
2. Mileage run
3. Ton-mileage hauled
4. Loaded and empty mileage
5. Number of days operated and idle
6. Number of pick-ups, deliveries, and round trips, and other performance data

From these records the total costs of the industry's motor transportation are ascertainable, including:

1. Total daily costs
2. Cost per annum
3. Cost per unit of weight hauled
4. Cost per unit of weight hauled per mile hauled
5. Miles per gallon of gas, per K.W.H., per gallon of lubricating oil, and per tire

Plant and Yard Location and Layout

Industries that manufacture products which can be handled economically by motor trucks, or which use raw

materials that can be hauled by trucks, have been vitally affected by the rising importance of the motor as a carrier of goods. Plants that were poorly located with reference to railway facilities found themselves in favorable sites for highway transportation. Plants closer to railroad stations and tracks, on roads suitable for the conveyance of goods by horse-drawn vehicles, were at a disadvantage compared to industries on good highways. The use of the motor brought new problems of plant location or relocation which traffic managers were obliged to consider and assist in solving.

Yard layout was similarly affected. Freight elevators, conveyors, loading and unloading platforms, and store-rooms had to be adapted to the use of trucks. Quicker transportation, more frequent loads, and the elimination of idle teams necessitate the routing of goods through the yards so that materials follow a logical and orderly route from the time they enter the plant until they leave as finished products.

Mechanical loading and unloading apparatus find increasing favor so that more rapid loading and unloading of trucks may reduce the idle time of the motor equipment. For the same reason, trailers, semitrailers, and demountable bodies have often been found to be economical. Cranes, winches, conveyors, and escalators have been used to advantage in handling heavy pieces and for the more rapid transfer of goods from trucks to storage platforms and in the reverse direction.

Shipping and receiving platforms must be arranged so that the trucks may have convenient access to them. The quicker the goods can be moved over such platforms between the trucks and storage places, the smaller will be the amount of platform space required.

Good roadways within the plant are vitally necessary to efficient motor operation, and roads suitable for horse-

drawn vehicles are often found to be unsuited for motors. The use of trucks, representing as it does a comparatively large investment in motor equipment, calls for further investments in mechanical handling devices, equipment, and roads, so that the maximum efficiency can be obtained by keeping the trucks in as nearly continuous movement with loads as is humanly or mechanically possible. Speed in handling has become the *sine qua non* and the substitution of machine equipment for horses and men presents a new problem in transportation which challenges the attention of every industry.

Garage Supervision

The custody and maintenance of the motor fleet are customarily delegated to a garage superintendent or foreman, although in many industrial concerns the traffic manager plays a supervisory rôle. The operation of the garage and the direction of the work of the mechanics, helpers, washers, cleaners, supply men, watchmen, and time clerks is left to the garage superintendent. The drivers are responsible to him for the care of their cars and for the performance of their routine work. The traffic manager must see that the work of the garage force is coördinated with that of the shipping and receiving rooms of the local plant transportation department and of the departments preparing the goods for shipment or for use in the industry after they have been received. He must see that trucks are ready for handling the inbound and outbound freight and that the freight is made ready for the trucks.

Coördination of Motor with Other Transportation Services

The most important function of the traffic department in connection with motor transportation is the correlation of motor with other transportation services. The traffic department must decide what portion of the through trans-

portation service is to be performed by trucks and what by other instrumentalities.

When inbound shipments from suppliers and outward shipments to customers are routed, consideration must be given to the class of goods, the weight of the goods, the distance to be transported, fragility, perishability, degree of urgency, and the charges for the transportation of the goods by rail, by water, by express, and by highway. If costs of transportation are computed accurately, the cost of trucking to and from stations and piers must be added to the rates quoted by these transportation companies, for otherwise the differences in rates between these two classes of transportation service and the last two, express and motor truck, will be exaggerated.

Instructions to route the goods must not only show the particular carriers to perform the service but must first specify the kind of service to be used—rail, water, express, or highway, or combinations of service of these. Standing instructions are frequently given to shippers to forward all shipments by a specified class of service and carriers unless special orders are received changing them. Rush shipments or shipments which require little packing for transportation by motor as compared with the amount required for safe rail, water, and express shipments, are routed by highway even though the rates may be higher.

Routing charts are supplied to the shipping room so that those preparing the shipments for forwarding may be informed as to the class of service and the exact route to be used. These directions are supplemented, in many instances, by bills of lading which are prepared in the traffic department and sent to the shipping room to guide the men in that department in the preparation of the goods for shipment. In other industrial plants, the bills of lading are prepared by a clerk in the shipping or local transportation department so that standing instructions from the traffic

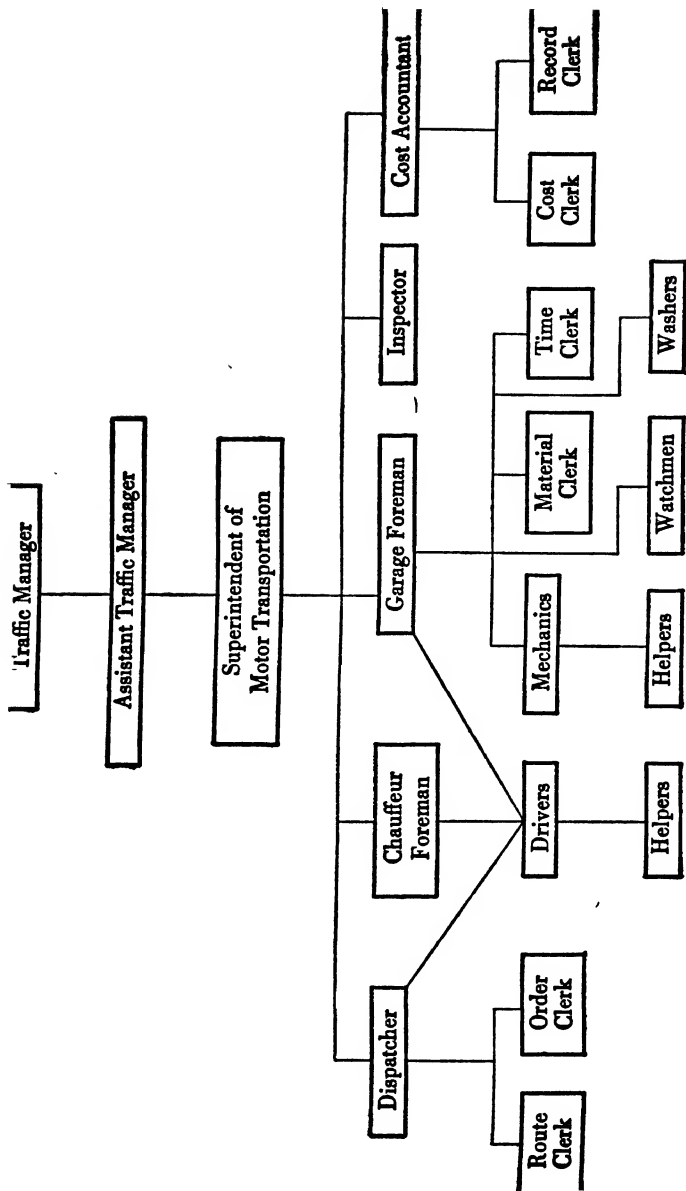


Fig. 17. ORGANIZATION OF A MOTOR TRANSPORTATION SUBDEPARTMENT

department as to routing are necessary. Special orders changing the route to be used on specified shipments are issued as required.

Similar charts of specified routes are prepared for the use of the receiving room so that inbound shipments may be checked to compare the routes actually used with those requested. Suppliers who ignore routing directions may be determined and the attention of the traffic manager called in such cases. Steps can then be taken to correct the routes and, if higher charges have resulted from the misrouting, the suppliers at fault may be called upon to compensate the buyer for the difference in price because of the error. In no other way can the best transportation service at the lowest rates be obtained.

Organizations

Organizations of local transportation departments or bureaus are conspicuous because of their differences. The use of motor trucks is a comparatively new thing and for this reason few industries follow exactly the same plans of organization. Instances are to be found where the local motor transportation department is an entirely independent department which coöperates with the traffic department but is not a part of it. Other industries maintain trucking bureaus or departments as subsidiary organizations attached to the plant or works department. Still other concerns give the management of local motor transportation directly to the traffic department. In the latter cases, a subdepartment is usually devoted to the management of the operation of the trucks, just as the rest of the bureaus of the general traffic department specialize in their specialized fields. Such organizations have the advantage of close coördination between all phases of transportation while giving specialists in each branch freedom to develop their bureau's work to its fullest strength.

CHAPTER VII

THE WORK OF THE RATE DIVISION

The Functions of the Division

The rate division or desk of the typical industrial traffic department is generally considered by traffic managers as one of the most important subdivisions of the department. The work deals with the charges paid or to be paid by the industry to the rail, water, express, and motor transportation companies for their services in connection with the movement of traffic to or from the plants of the industrial establishment.

Rate divisions of the traffic departments found in most large business organizations perform five well defined functions. In the first place, the typical rate division or desk is intrusted with the task of obtaining rate quotations from the carriers. This information is often obtained from the tariffs of the carriers kept in the tariff files of the industrial traffic department, but, in many instances, the information must be obtained by correspondence, telephone conversation, or personal interview with the representatives of the carriers at the local or general freight offices.

The second important duty of the rate division is the quotation of rate information to the departments of the company which require such information. The sales and purchasing departments require rate data for their guidance in entering into sales agreements or placing orders. The export, import, advertising, accounting, executive, and other departments of the organization occasionally need such information and, in some instances, rates must be

quoted for the benefit of customers and suppliers, or those with whom the industry is seeking to establish business relations.

A third phase of the typical rate division's activities is the preparation of rate tabulations and other statistical studies, showing rates of freight paid by the company or its competitors on the traffic to and from the industry. Information of this sort is used in the preparation of rate cases before regulatory commissions, in the presentation of complaints before the carriers, for the collection of reparation claims, as well as for the guidance of the sales, purchasing, and other departments of the company in making business arrangements which require rate data.

Rate studies and analysis constitute a fourth branch of the division's work. Past, present, and proposed rates are frequently analyzed and used in comparisons of rates paid in the past, present, and future. The effects of rates on the business of the company are studied with the end in view of obtaining rates which are reasonable and which do not impose unreasonable burdens upon the business of the company.

Finally, the rate division is usually called upon to audit the bills presented by rail, water, express, and motor carriers for transportation services rendered. Correct bills are approved for payment, while bills containing incorrect rates, weights, ratings, or extensions are adjusted with the carriers before payment is made or overcharge claims are prepared to be filed against the carriers.

Although these functions are fairly distinct in themselves, they constitute a group of allied functions, all of which pertain to one problem with which the industrial traffic department must deal—the problem of obtaining adequate transportation at reasonable rates. The functions of the rate division overlap, to some extent, the duties of other divisions of many traffic departments, for the information

obtained and compiled in the rate division is often used in other branches of the departmental organization. For this reason, the bureau chief in charge of the rate division is usually an assistant traffic manager or the man in line for promotion to that position. The general work of the division is frequently supervised very closely by the traffic manager personally, for the successful administration of this phase of the department's work requires thorough familiarity with rate adjustments throughout the United States and proficiency in the use and interpretation of tariffs. An error in the application of proper rates governing any considerable movement of traffic may result in losses which no amount of good work by the department can offset. The work of the rate division is so vital to the success of the whole department that traffic managers are careful to select competent men to do the work and seldom permit the work to get far from their personal supervision.

Rate-Division Organization

The exact form of organization set up to handle rate work for an industry depends upon the nature and volume of the traffic and upon the scope of the rate work to be performed. An industrial concern having a considerable volume of carload and less-than-carload traffic to and from the plant, which requires that its traffic department perform all of the rate functions enumerated above, has need of a well organized rate bureau consisting of several men under the jurisdiction of a competent chief rate clerk.

Several well defined plans of organization are found in rate-bureau organizations. One plan, by far the most usual, provides for the division of all the rate work—including the quotation of rates to various departments, customers and suppliers, the collection of rate information, the auditing of freight bills, the preparation of rate tabulations, and the study of rate structures—among the members of the

bureau on a functional basis. One man is placed in charge of a definite phase of the work of the bureau and is responsible to the chief of the bureau for that work. A typical functional organization is shown in Figure 18.

The quotation clerk, in an organization of this sort, attends to the detailed work of obtaining rate data from the offices of the railroads, steamship lines, express companies, and motor transport companies, or from the files of tariffs of such carriers kept in the tariff bureau of the industrial department. The rate information, so obtained, is communicated to the departments or outside concerns requiring the information.

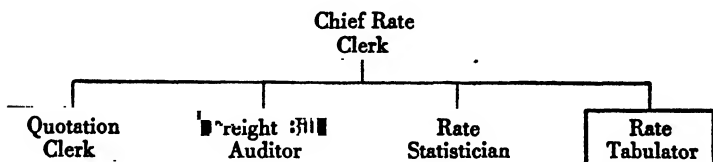


FIG. 18. RATE-DIVISION ORGANIZATION: FUNCTIONAL PLAN

The freight bill auditor receives the freight and express bills from the agents of the delivering carriers and checks them for accuracy.

Charts and exhibits, graphically illustrating rate situations, are prepared by the statistician, while rate tables, rate memoranda for the use of company salesman, and other similar rate data are prepared by the rate tabulation clerk. Card index systems of rate data for ready reference are also prepared by the tabulator to assist other members of the department who have occasion to use the same rate data frequently.

The chief rate clerk supervises the work of all of these men and particularly the work of the statistician. Rate material for statements and exhibits, for use in cases before railroad traffic committees, government regulatory com-

mittees, and courts, are prepared by the statistician under the supervision of the chief rate clerk and often of the manager of the traffic department. The chief rate clerk frequently confers with the soliciting representatives of the carriers regarding rates governing movements of freight. In this capacity, the chief rate clerk acts as one of several members of the department who collaborate in the selection of routes over which freight is to move.

The chief clerk assists the quotation clerk in obtaining difficult information and in verifying rate quotations to be used for important movements of traffic. Rate adjustments are sought by the traffic manager with the assistance of the chief rate clerk. The information is usually prepared by the statistician and the chief clerk, and in important cases several of the members of the rate bureau may be temporarily relieved of their other duties and assigned to the special work of preparing rate data.

A second general plan of organization is less common than the plan outlined above and is found only in the larger traffic departments which control traffic in all sections of the United States. This plan, which we may call the territorial or geographical plan of division, provides for the division of the rate work of the department among the members on the basis of territory. One or several clerks, depending upon the amount of work to be done, attend to all rate matters within a given territory. A usual division provides for an Eastern, a Southern, and a Western rate desk.

Each territorial rate desk obtains and quotes rates, audits freight bills, prepares rate tabulations, and makes rate studies applying to traffic moving to or from the section of the country in which it specializes. This mode of organization has one obvious advantage in that it tends to develop men who are proficient in rates in the territory in which they specialize. Each desk, in addition to attending to all

regular rate functions, routes the freight upon which it quotes rates. No routing clerks that devote all of their time to routing work are found as a rule in rate organizations organized along territorial lines. The clerks of each territorial rate desk also assist the tariff clerks in collecting, revising, and caring for the tariffs applying in their particular territory.

Rate tabulations and analyses, required from time to time by the traffic manager, are prepared by the territorial specialists under the supervision of the chief rate clerk and the head of the department.

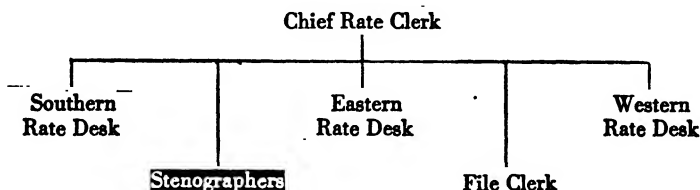


FIG. 19. RATE-DIVISION ORGANIZATION: GEOGRAPHICAL PLAN

A typical rate division, organized according to a geographical or territorial plan, is shown in outline form in Figure 19.

Several other plans, for the most part mixtures of the plans shown previously, are to be found in traffic organization. An explosive- and chemical-manufacturing company follows territorial lines in so far as it has four territorial rate desks, but departs from this general plan in that one desk of the rate division attends to all express and parcel-post rate matters.

Another variation from these plans is found in departments in which certain phases of rate work are divided among the members of the division according to a commodity basis. Large concerns handling a few well defined commodities or groups of commodities sometimes have rate

divisions in which individual desks specialize in rates on a given limited group of commodities without regard to territory. One desk attends to all iron and steel rates, another specializes in cement rates, another in lumber, and so on. The number of specialized commodities handled and the size of the organization determine how far this specialization is carried out in practice.

It is difficult to generalize upon the subject of rate division organization. Enough has been said above to indicate the general lines along which representative rate divisions are organized. The detailed structure of each organization is determined by the nature of the business, the nature and volume of the tonnage, the size of the industry, the location of sources of supply and markets, the policy of the company, the personal preference of the department manager, and finally the caliber of the personnel of the department.

Obtaining and Verifying Rate Quotations

Even though the industrial traffic department maintains a good tariff file, it frequently becomes necessary to supplement this source of rate information or to verify the rates checked from the tariffs by obtaining rate quotations from the freight departments of the carriers. Such quotations are frequently obtained in the case of large movements of freight even though a rate can be checked from the tariff files. Industrial rate men, as well as those of the railroad companies, prefer to verify their own work by having the results of another's work before them so as to make "assurance double sure." The probability of error is materially reduced if an industrial and a railroad rate man, working independently, check the same rate.

Rates to or from points outside the usual field of activity of the concern or rates on certain commodities not usually dealt in, which cannot be checked from tariffs on file in the

THE WORK OF THE RATE DIVISION

department, must also be obtained from the offices of the carriers in any of the ways to be discussed below.

Rate quotations are frequently obtained by telephone from local freight stations or near-by district, division, or general offices of the carriers. A quotation clerk of the industrial traffic department calls upon the carriers' rate clerks for rate data which he lacks or to confirm data checked from the tariffs on file. One man is usually made responsible for all such quotations and requests for written confirmation are usually made at the time the quotations are sought. Care is necessary in dealing with rates communicated by telephone, hence confirmations are essential so that the chance of error may be reduced and the responsibility for incorrect quotations traced back to the person responsible.

A telephone quotation form is used in some instances as a guide to the rate clerk and as a written record of conversation. A duplicate of this record may be sent to the quoting carrier for confirmation, or the memorandum may be taken without duplicate copy and a request made for confirmation over the telephone at the time the rate request is made. The memorandum may be kept until the letter from the office of the carrier, confirming the quotation, is received. Pads of memoranda forms, in tablet form, may be kept on the desk of the quotation clerk so that they may be convenient and in good condition. A telephone memorandum form is shown in Figure 20.

Rate quotations, which are not so urgently needed as to require telephone calls, may be requested by post card, addressed to the offices of the carriers. Many industries are located at points along the lines of the railroads at considerable distances from the carriers' district or general freight offices, so that telephone calls, except for urgently needed rates, are impracticable. In such cases, the mails are used to obtain necessary quotations. Printed post-card

AMERICAN MANUFACTURING COMPANY	
TRAFFIC DEPARTMENT	
(Date)	
Rate on.....	How packed
From	To
C/L L.C.L.	
Is, per {cwt.	C/L min.....
{ton:	
Tariff authority	Route
Quoted by (Carrier).....	(Persons quoting).....
Quotation obtained by.....	
Confirmation requested.....	

FIG. 20. TELEPHONE RATE QUOTATION MEMORANDUM

forms are frequently used to avoid the expense of individually dictated letters and to reduce postage expense. The clerk responsible for obtaining rate information fills in the blank spaces on the card and mails it to the rate office of the carrier. Carbon copies of the request are frequently kept so that the request may be repeated if the information is not received in due course. This is often handled by placing the carbon copy of the request in a "tickler" file so that the matter will be brought to the attention of the rate clerk again in the course of several days or a week, within which time a reply should be received from the carriers. When the reply is received the copy of the request is removed from the file and the data used. If no reply is received by the date it is expected, a reminder is sent to the carrier. If several routes are available, requests may be sent to several carriers so that the quotations may be compared.

A specimen post-card rate request is shown in Figure 21.

Space is provided for answers so that the carriers may reply by filling in the blank spaces. Stenographic expense is saved them in this way.

AMERICAN MANUFACTURING COMPANY	
TRAFFIC DEPARTMENT	
NEW YORK, N. Y.	
(Addressee)	(Date) .....19....
(Title and Carrier).....	
(Address)	
Please quote us current rates on.....	
L.C.L.....	C/L..... C/L min.....
From.....	To.....
Via	
Tariff authority.....	
Is rate {increase} authorized?.....	
{decrease}	
To what figure?.....	When effective?.....
.....	
<i>Traffic Manager</i>	
By.....	

FIG. 21. RATE REQUEST POSTAL CARD

The same result is accomplished in another way by the use of duplex postal-card forms. Standard double postal cards are printed so that the original card may be filled in by the industrial rate clerk with little trouble, while the duplex portion of the card is printed in outline form so that the desired information may be easily inserted by the carriers' rate clerk. The return card is usually printed with the address of the requesting concern. A typical duplex card is shown in Figure 22.

Rate information may be obtained in a third way, by letter. Individually dictated and typed letters may be sent to the offices of the carriers requesting the desired information. This method is ordinarily used in obtaining more important quotations or in requesting information which cannot be readily obtained by form communications.

Mimeographed or printed form letters are frequently

used, particularly when rates on several commodities or between several points are desired. Several types of form letters are used by industrial traffic departments. One very common form contains a request for the desired rate information drawn up in outline form, similar to Form 21, except that space is provided for requesting rates on a number of commodities or between a number of points. Another type of form letter is mimeographed or printed on letter-size paper which is perforated so that the lower half may be detached. The upper half contains the request for the rate information required and the lower half is printed in outline form so that the rate office of the carrier of which the information is sought may fill in the information, detach the lower half of the letter, and return it to the requester.

Form letters of any sort are time and labor savers for the industrial traffic department, and duplex forms such as the latter type of form letter and the duplex post-card rate-request form save the carriers a considerable amount of time and labor in quoting rates. This time and labor saving on the part of the carriers very often results in quicker replies to rate inquiries and redounds, therefore, to the benefit of the industrial traffic department. A specimen form letter of the second type is shown in Figure 23.

In addition to the three methods of obtaining rate quotations mentioned above, rate information is often obtained by requests made of the soliciting freight representatives of railroads, water lines, express companies, and motor-transport lines when they call to solicit tonnage. Quotations thus requested are usually confirmed in writing by the freight department rate offices of the carriers. Industrial rate men frequently request that such confirmations be made so a permanent record may be had in case of misunderstanding of the verbally quoted rate.

AMERICAN MANUFACTURING COMPANY

TRAFFIC DEPARTMENT

NEW YORK, N. Y.

(Date).....19....

File No.....

(Addressee)

(Title and Carrier).....

(Address)

Please quote rates on traffic described below as promptly as possible.

.....
Traffic Manager

By.....

(Date).....19....

File No.....

TRAFFIC DEPARTMENT,
AMERICAN MANUFACTURING Co.,
NEW YORK, N. Y.

Current rates on..... Packed.....

are L.C.L..... C/L..... C/L min.....

From..... To.....

Via.....

Tariff authority.....

Rate {increase} to.....
 {decrease}

is to become effective.....

Authority.....

(Carrier)

(Address)

By

FIG. 22. DUPLEX RATE REQUEST POSTAL CARD

Responsibility of Carriers for Rate Quotations

Rates quoted by the rail carriers by their rate clerks, traffic representatives, or officers are not binding price offers in the legal sense. The law is clear upon the point that the only legal rate applicable upon given traffic between given points at any one time is the rate named upon such traffic in the tariffs of the carriers filed with the Interstate Commerce Commission, as prescribed by the Act to Regulate Commerce of 1887, as amended. Verbal or written quotations of rates, either higher or lower than the rates named in the effective tariffs, do not alter the fact that the tariff rate governs and such rate only. A quotation in writing by rail carriers which causes financial loss to the person using the rate is, however, a finable offense. The law is clear upon this point. Section 6, paragraph 11, of the Act to Regulate Commerce, as amended, provides that:

If any common carrier, subject to the provisions of this Act, after written request made upon the agent of such carrier, hereinafter in this section referred to, by any person or company for a written statement of the rate or charge applicable to a described shipment between stated places, under the schedules or tariffs to which said carrier is a party, shall refuse or omit to give such written statement within a reasonable time, or shall misstate in writing the applicable rate, and if the person or company making such request suffers damage in consequence of such refusal or omission or in consequence of the misstatement of the rate, either through making the shipment over a line or route for which the proper rate is higher than the rate over another available line or route, or through entering in any sale or other contract whereunder such person or company obligates himself or itself to make such shipment of freight at his or its cost, then the said carrier shall be liable to a penalty of two hundred and fifty dollars, which shall accrue to the United States and may be recovered in a civil action brought by the United States.

The provisions of this paragraph, it will be noted, apply to all carriers subject to the Act to Regulate Commerce, as

AMERICAN MANUFACTURING COMPANY

TRAFFIC DEPARTMENT

NEW YORK, N. Y.

(Date)19....

File No.....

(Addressee)

(Title and Carrier).....

(Address)

DEAR SIR: Please quote rates on the traffic listed below. In the event rates are to be increased or decreased please indicate new rates, dates to become effective and tariff authorities for such changes.

Yours very truly,

.....
Traffic Manager

By

(Please detach and return lower half)

TRAFFIC DEPARTMENT,
AMERICAN MANUFACTURING CO.,
NEW YORK, N. Y.

(Date)19....

Attention File No.....

GENTLEMEN:

Rates requested are as follows:

Commodity	From	To	L.C.L.	C/L.	C/L Min.	Tariff Authority	Increase or Decrease or Authority

REMARKS:

(Carrier).....

(Title).....

By.....

FIG. 23. DUPLEX FORM RATE REQUEST LETTER

amended by subsequent Acts, including the Transportation Act of 1920. Thus railroads, express companies, and rail-and-water lines participating in the through movement of traffic, "partly by rail and partly by water when both are used under a common control, management or arrangement for a continuous carriage or shipment," and engaged in interstate commerce are bound by the provisions of this Act.

All-water lines in the foreign, coastwise, and intercoastal trades, which are subject to the jurisdiction of the Shipping Board and not to the Interstate Commerce Commission, publish tariffs subject to the rules of the former regulatory body. Rate quotations of such carriers are frequently made in writing with binding effect upon the quoting carrier if space is firmly booked for a stated sailing at a definite rate of freight. Rates of freight are commonly matters of contractual nature in the foreign trade and not infrequently in the domestic service.

Rail carriers must, however, supply rate quotations to any one within a reasonable time. Industrial traffic managers, therefore, are well within their rights in requesting all the rate information they need as frequently as they choose. The penalty clause, while it does not provide for the reëmbursement of shippers suffering financial losses as the result of misquotation by the carriers, nevertheless has the effect of putting the carriers on their guard in quoting rates in writing promptly and correctly.

Making Rate Information Available

The rate data most frequently used must be transcribed from tariffs, quotation letters, and other sources to index files so that the information may be available for those of the department who use rates frequently. The department's quotation clerks, routing clerks, and freight bill auditors are required to use rates on certain commodities or

between certain points so many times that it is impracticable for them to consult tariffs or correspondence each time. The practice of attempting to memorize frequently used rates is often resorted to by industrial as well as railroad rate clerks, but such a course is extremely dangerous. Rate changes occur so frequently that it is hazardous for a man to trust his memory, and a slight slip of memory may result in considerable loss.

A number of devices are used to file rate data for quick and easy reference. Ordinary 3½ by 5 inch cards are used in a number of departments to record the information. These cards show the commodity, method of packing, rates, points of origin and destination, carload minimum, and other similar details. These may be filed alphabetically by commodity, while another set of class-rate cards may be used to show the class rates from points of origin where most of the concern's inbound traffic originates and to the points where the greater part of the outbound traffic is destined. These class-rate cards may be filed alphabetically according to points of origin or destination.

Printed form cards of various sizes and with varying degrees of detailed information are used by other departments, while loose-leaf rate books sometimes are used in place of card indexes in others. A number of copies of the cards or books are prepared, sufficient to supply a desk copy to all members of the department who use rate information regularly. Any index system of this character must be carefully supervised by a competent rate man if it is to be successful. Many departments use these systems successfully by delegating the task of preparing and supervising the files to the rate statistician or to the chief rate clerk, who examines the cards or books periodically and makes special checks every time a rate change is noticed. When so supervised and checked against inaccuracies, rate index systems have proved great time and labor savers.

From	To			
Tariff Authority	<div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;">{</div> <div style="text-align: center; padding: 0 5px;"> Official Southern Western </div> <div style="display: inline-block; vertical-align: middle;">}</div> </div>	Classification Governing		
CLASSES				
Class Rates				
Commodity Rates				
Route {	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">All rail.....</div> <div>.....</div> </div> <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">Rail and water.....</div> <div>.....</div> </div> <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">Other</div> <div>.....</div> </div>			

Commodity	Container	L.C.L.	C/L	C/L Min.

FIG. 24. RATE INDEX CARD

Rate information, obtained in the ways outlined above and prepared for the use of the members of the traffic department in their rate, service, and claim work, is also used by the department in making rate quotations to the purchasing, advertising, export, and sales departments of the company as well as to suppliers and customers. This branch of service is one of the important functions of the traffic department, and the methods employed by representative traffic departments in the performance of this phase of transportation work are sufficiently important to be sketched briefly.

Rate Quotations to Allied Departments

The typical industrial traffic department is frequently called upon to quote freight and express rates from various

sources of supply of raw materials or other supplies needed by the industry. Large industries, requiring a variety of materials, frequently draw their supplies from a number of sections of the country and from numerous suppliers. The current and future rates of freight from such points of origin to the factory must be carefully checked so that the buyers of the purchasing department may be supplied with reliable rate data.

Rate Quotations to the Purchasing Department

The purchasing department seeks to buy the commodities needed at the lowest price possible, provided the goods are of the required quality, the supplier trustworthy, and deliveries can be made when and as needed. In many instances, the goods needed may be bought of a number of suppliers so that the buyer is able to obtain competitive bids. This competition may be confined, in some instances, to producers in a relatively small portion of the country from which the rates to the plant are much the same, while in others the competition for the trade of the concern may be entered into by many producers in a number of sections. From these districts the rates of freight may vary sufficiently to permit the purchasing department to buy the needed commodities at very much better delivered prices from one producer or district than from others.

Buyers of industrial purchasing departments frequently ask prospective suppliers to quote prices on different bases so that advantage may be taken of favorable freight rates. Bids may be obtained f.o.b. cars point of origin from a number of producers and the total cost of the goods including freight from the points of origin to the factory may be ascertained. Prices with freight allowed to destination, or including delivery to plant, may be obtained so as to afford bases of full comparison. The rate division of the traffic department is called upon to supply or verify the rate

information necessary to compare these quotations. This method of purchasing goods and transportation insures that the industry obtains its raw materials and supplies at proper prices. Close coöperation between the buyers and the rate men is necessary to achieve this result.

The precise form in which the rate quotation is requested or made depends for the most part upon the urgency of each case. Interviews, telephone conversations, letters, and interoffice memoranda are all used, depending upon the circumstances which determine the degree of urgency. Permanent written records are frequently kept of rates quoted in the course of personal interviews or telephone conversations so that errors may be guarded against and the responsibility for misquotations established. Verbal quotations are required to be confirmed by the maker, in many organizations, immediately after they are made. Pads of interoffice memoranda forms, printed in outline form so that the information may be filled in easily, are provided for the use of each clerk making rate quotations. Forms of this sort frequently provide space for the current rate to be quoted as well as space for information as to the points between which the rate is applicable, the method of packing, the route, and the carload minimum. If any change in the present rate has been announced, the date of the proposed change and the new rate are often indicated.

Information of this sort enables the purchasing department to place orders for quantities of needed goods to be shipped before a rate increase or to withhold orders for goods not urgently needed until rate reductions have become operative. Routing instructions may also be placed directly by the purchasing orders at the time the orders are placed if a route is selected and indicated on the quotation memorandum. The traffic department is relieved, in such cases, of the necessity of advising the supplier how to route the goods.

Memoranda of this sort are not only used to confirm verbal quotations made necessary by the urgency of certain cases, but are frequently used to reply to written inquiries from the purchasing or other departments. Interoffice memoranda requesting rate data are replied to by the quotation clerks of the traffic department on quotation forms in duplicate. One copy, the original, is sent to the department requesting the information, while a duplicate copy is attached to the request and filed as a permanent record of the transaction.

A typical rate quotation memorandum form used to convey or confirm rate quotations made to the purchasing department is shown in Figure 25.

AMERICAN MANUFACTURING COMPANY TRAFFIC DEPARTMENT <i>Interoffice Memorandum</i>	
	(Date)
PURCHASING DEPARTMENT	
Attention	
Rate on.....(Commodity)..... Packed.....	
From..... To.....	
Is..... L.C.L..... C/L..... C/L min.....	
Rate change authorized to.....L.C.L.....	
C/L..... C/L min.....	
Effective	
Traffic Department	
By	

FIG. 25. RATE QUOTATION MEMORANDUM FORM

Rate Quotations to the Sales Department

Quotations are frequently made to the sales department, for transportation charges often are controlling factors in determining sales. The sales department must be informed

concerning the general levels of freight rates applying from the industry to the various sections of the country in which the concern seeks to market its products, so that the competition of rival industries may be intelligently met. Prices of goods must sometimes be cut when the industry is laboring under the burden of a rate disadvantage into certain markets, so that the prices of the goods plus freight to destination may be equal to or less than the prices at which competitive goods are offered for sale in those markets. The sales department can proceed to map out sales campaigns effectively only if the freight rate situation is thoroughly understood. Otherwise, favorable markets are apt to be overlooked and futile efforts made to establish the line in markets where competitors enjoy insuperable rate advantages. A careful market survey must be made by the sales and traffic departments to discover the markets in which the concern can do business advantageously under existing rate adjustments and the markets in which business might be done if satisfactory rate adjustments could be made. The traffic department functions in two ways in such situations: first, it supplies the information as to current rates so that the sales department may concentrate its efforts in fertile fields; and second, it proceeds to remove, as far as possible, rate discriminations or obstacles so that the barren fields of sales activity may be made fertile by obtaining favorable rate adjustments.

The sales department has other rate needs which are supplied by the traffic department. District sales offices and traveling salesmen frequently need rate information to serve the trade effectively. The rates on the commodities sold from the factory to the principal points in the various sales territories must be obtained and tabulated for the use of the sales representatives. Such rate tabulations are often prepared in loose-leaf memorandum book form so that new sheets may be substituted for old ones as frequently as

rate changes make revision of the tables necessary. Sheets are arranged in these data books alphabetically, according to the destinations, and show the less-than-carload and carload rates, carload minima, the dates rates became effective, and, if rate changes are impending, the date of such change and the new rates. Specific rates are shown for articles moving under commodity rates, while the class rates are indicated separately with a key page or pages showing the class ratings to which the principal articles sold by the concern are assigned. All-rail, rail-and-water, all-water, and express rates are sometimes all shown so that the salesman can compute the full delivered price to prospective customers.

These rate manuals are valuable sales assets provided they are painstakingly prepared and constantly revised so as to be thoroughly up-to-date. The salesmen, armed with this valuable information, are able to urge that orders be increased sufficiently to enable the buyers to take advantage of carload rates or to warn the buyers of prospective rate advances as inducements to hasten the placing of orders. A salesman equipped with specific reliable rate information has another advantage. Buyers cannot use freight rates as an excuse for not buying when the real resistance for not buying may be some totally different reason. Buyers, knowing that the salesman is informed as to the rates on his products from factory to buyers' stores, are more apt to be frank and the salesman is able to find what the real objection to his goods is, so that it may be overcome.

In seeking rate quotations on specific products to given markets or from the plants of competitors to competitive markets, sales departments frequently use printed rate request forms which are addressed to the traffic department and transmitted by company mail service. Such quotations are requested from time to time, as occasion for their use arises, by interview or telephone call as well as by memo-

AMERICAN MANUFACTURING COMPANY SALES DEPARTMENT <i>Interoffice Memorandum</i>	
	(Date).....19.... File No.....
TRAFFIC DEPARTMENT	
Attention	
Please quote rates on.....	
Packed	
L.C.L..... C/L..... C/L min.....	
Date effective.....	
If rate changes are contemplated what are new rates, L.C.L.....	
C/L..... C/L min.....	
Sales Department By	

FIG. 26. A TYPICAL SALES DEPARTMENT RATE REQUEST FORM

random. The rate division ascertains the desired rates by communication with the freight offices of the carriers or by reference to the tariffs of the carriers in the departmental tariff file, and quotes the rates to the sales department by correspondence or otherwise.

Typical interoffice request and reply forms, used respectively by the sales and traffic departments of a large industrial establishment, are shown in Figures 26 and 27.

Forms of these general types are used in many establishments to confirm telephone or other verbal requests and quotations in addition to being used as the regular inter-office request and quotation forms. Many industrial organizations pay particular attention to the matter of communication of information between departments and particularly to the transmission of rate information. A

AMERICAN MANUFACTURING COMPANY TRAFFIC DEPARTMENT <i>Interoffice Memorandum</i>	
	(Date).....19.... File No.....
SALES DEPARTMENT	
Attention	
Your File No.....	
Current rates on.....	
Packed	
L.C.L..... C/L..... C/L min.....	
Date effective..... New rates as follows authorized,	
L.C.L..... C/L..... C/L min.....	
Date effective.....	
Traffic Department By	

FIG. 27. REPLY FORM FOR RATE INFORMATION

number of concerns insist upon all important communications being written and carbon copies kept by the departments supplying the information so that the errors may be reduced and the responsibility for mistakes placed upon the offender. Memoranda forms facilitate the communication of all the desired information in concise form and save a considerable amount of stenographic work.

Rate Quotations to the Export Department

The traffic departments of concerns engaged in foreign trade are required, in many instances, to keep the export department informed as to rates applying from inland points of origin to the ports of the United States and, in some cases, from the ports of exportation to foreign destinations. Establishments maintaining complete export

departments sometimes have export traffic divisions or bureaus as parts of such departments, but comparatively few concerns are so completely equipped for the export business.

Quotations of export rates to the ports, steamship rates from the ports of the United States to foreign ports, and rates from the foreign ports of entry to interior destinations abroad are obtained by many industrial traffic departments upon requests of the export department. Forms similar to those used in making quotations to the sales and purchasing departments are frequently used. A unique combination request and quotation form used by a prominent exporting concern is shown below. This form is divided into halves—the left-hand side is filled in by the export department in requesting the rate information, while the right half is used by the traffic department in replying. No carbon copies of this request and reply form are used; the original, after it has been returned to the export department and the information has been noted, is attached to the other correspondence to which it relates and the whole file kept as permanent records in the files of the export department.

Similar inland, ocean, and foreign rate quotations are obtained by many American industrial traffic departments connected with concerns engaged in the import business. Except for the comparatively rare establishments maintaining complete import departments with import traffic sub-departments, the regular traffic department functions in connection with import rates in the same manner as with export rates.

Rate Quotations to the Advertising Department

Quotations of rates from the factory to the principle points in territories in which the advertising department wishes to conduct campaigns, or from the plants of the

AMERICAN MANUFACTURING COMPANY	
EXPORT DEPARTMENT	
<i>Interoffice Memorandum</i>	
<i>Request Side</i>	<i>Reply Side</i>
TRAFFIC DEPARTMENT	..... 19....
Please furnish rates from	Rate
.....
To .....	.....
On .....	.....
.....
.....
.....
.....
Proposed Shipping Date.....	.....
Dept.	Traffic Department
Per	Per

FIG. 28. EXPORT DEPARTMENT DUPLEX RATE REQUEST FORM

most important competitors to such territories, are often made by industrial traffic departments. Information of this sort is communicated to the advertising department in memoranda which differ from those used in quoting the purchasing, sales, and export departments only in that quotations to those departments are confined usually to one or a few rates, while quotations to the advertising department frequently are somewhat lengthy statements of rates between a number of points. Individually written letters are used to convey this information in many cases, while in others form communications are used. If the latter course is pursued, full letter-size forms, sufficiently large to permit a number of rates to be inserted, are used.

Rate Quotations to Outsiders

Industrial traffic departments frequently supply rate information to suppliers or customers of the concern. This service to the customers is an important item of the aid rendered by traffic departments to sales departments, for it develops good will for the company.

Customers, in some cases, require rate data to confirm the rates from the factories of suppliers to their stores or warehouses. These rates may then be checked by their own industrial traffic departments. In still other cases, one traffic manager may wish to obtain the benefit of another's assistance in preparing rate analyses or tabulations to be used as exhibits in rate adjustment cases. Again, a customer may wish to check his costs, including all freight and handling charges to destination, from all of the concerns from which he is buying goods, so that a bid from a competitor may be properly analyzed and compared with prices at which similar goods are available elsewhere. There are many reasons why customers need rate service, all of which indicate that the customers are interested in the concern of which the requests for such service are made. The traffic departments of the sellers are able to render valuable assistance to the sales departments by responding generously to such appeals, and services of this character are bound to be reflected in increased sales.

Suppliers in some cases are furnished with information as to rates, especially if the buyer is asking for bids to supply goods at delivered prices. Every assistance is given those who sell the commodities needed so that the industry may obtain the benefit of competition of suppliers.

Rate information is communicated to customers, suppliers, and others outside the industry in a number of ways by industrial traffic departments performing such services. Telephone conversations, interviews, and correspondence are all used as media of communication. Ordinary rate

quotations, if made by telephone or in the course of personal interviews, are frequently confirmed by form quotation letters similar to the forms used in interoffice rate correspondence. Special information not lending itself to the rather rigid outlines of forms is communicated by individually prepared letters. If form letters are used, care is exercised to see that the forms are well printed, multi-graphed, or mimeographed so that they may present a good appearance. They are usually drawn up, like the rate quotation forms used between departments of the same industry, so as to show the effective rate, the tariff authority, effective date of tariff, commodity, quantity, points of origin and destination, routes over which the rate is applicable if the rate is restricted to a few routes, and any information available concerning prospective increase or decrease in the rate quoted.

A number of progressive industrial traffic departments supply rate information to the customers of their concerns without requests for such service. The traffic department of a leading specialty-manufacturing company notifies all new customers that the department attends to the supervision of freight charges without regard to the basis on which goods are sold or whether shipper or consignee pays the freight charges. The customers are informed that the correct freight charges will be noted on the memorandum copies of all bills of lading which are attached to the original invoices sent at time shipments are forwarded. This notation shows the correct rate per hundredweight, the correct weight, total charges, and tariff authority. Consignees are cautioned to pay only the amount indicated and to notify the shipper if a greater sum is demanded by the delivering carrier so that an overcharge claim may be prepared.

Another large manufacturing concern computes the correct charges and attaches a printed form, showing correct

weight, rate, total charges, and tariff authority, to the invoice sent the customer. A form of this sort is shown in Figure 29.

AMERICAN MANUFACTURING COMPANY

TRAFFIC DEPARTMENT

NEW YORK, N. Y.

(Date).....19....

File No.....

The correct weight of this shipment is.....pounds.

The correct rate from the factory to.....(Destination)..... is
..... per hundredweight.

Charges for this shipment are.....

If more is sought to be collected, please notify us immediately.

Tariff authority.....
Traffic Manager

Date effective..... By

FIG. 29. CUSTOMER'S RATE MEMORANDUM FORM

Services of the sort indicated are effective ways of protecting the interests of customers and are very much appreciated by customers, especially by those who are not equipped with traffic departments and who are not familiar with rate and claim procedure.

Preparation of Rate Tabulations

Tabulations of existing rates are prepared by many rate bureaus as aids to salesmen of the company. This information is often prepared in loose-leaf book form for the use of salesmen, as has been described in connection with the aid rendered sales departments.

Other forms of rate tabulations are frequently made by rate divisions for their own use or for use by other bureaus

of traffic departments. Tabulations of commonly used rates are prepared for the use of the freight bill auditors. Statements of the rates in effect from various points of supply or to the concern's principal markets are tabulated for the guidance of the traffic department's routing clerks as well as for members of the purchasing and sales departments. Comparative rates paid by competitors to their factories from points of supply or to their principal markets are compiled so that the position of the industry with reference to its competitors may be fully appreciated. Tabulations showing the rates between given points by standard all-rail, differential-rail, rail-and-water, all-water, express, and motor routes are frequently prepared for the use of routing clerks, the shipping and receiving departments, suppliers, customers, or other departments. Statements of mileage rates in effect in various states or rate territories are frequently tabulated for purposes of comparison. A statement of this type is shown opposite.

Rate Studies and Analyses

Work in connection with rates is carried beyond the mere tabulations of rates in force. Studies are frequently made to illustrate the effects of rate adjustments upon the company's business so that more favorable adjustments may be obtained from the carriers. Present rate structures are frequently compared with past or proposed rates so that the case of the industry may be put clearly and forcefully before those in position to remedy the maladjustments complained of. Exhibits are prepared for cases presented to the various state commissions, the Interstate Commerce Commission, or in the courts.

The rate data are sometimes prepared in the form of charts, graphs, or maps, so that the information may be more clearly visualized and the tables of figures translated into relative quantities more easily. The Interstate Com-

COMP.	STA	ENT	= :				B	C	D	C.	C.	C.	hunti	C.	ra k	ure	hunti	hunti	pos
			M																
Fr	54		36	19															
...	58.5		39	20.5															
Blai	64.5		43	22.5															
...	55	4	37.	23.5									...	21.5	13.5	70	H 62		
...	54	4	36	19															
...	36.5	3	24	12.5															
Colorado	..	37	2	.06															
....	n																		
Southern Dist	ge	85.3	7	63.									36.9	33.2	36				
terstate Seal	lk	97	8	68									39	29	34				
Proposed Sout																			

merce Commission has repeatedly expressed its approval of illustrative exhibits of this character, so it has come about that few important cases are presented before that body without accompanying exhibits. The custom has spread until such exhibits are used very widely in traffic department work.

Copies of the original exhibits are necessary in rate cases for the use of counsel, the commission, and interested parties. Photostatic prints, mimeographed or multigraphed copies are most frequently used.

Auditing Freight Bills

Freight bills as they are received from the various transportation companies are audited by members of the rate bureaus of industrial traffic departments. Concerns on the approved credit lists of the carriers have forty-eight hours in which to check the bills after the goods arrive, otherwise the bills must be paid and audited afterwards. If the former condition prevails, the errors in billing are pointed out to the agents of the delivering carriers for correction before payment. Correct bills are certified to the treasurer or other official in charge of company funds for payment. Concerns not on approved credit lists make their freight audits after the bills have been paid and file overcharge claims for the excess amounts paid.

Freight bill auditing is an exacting task requiring thorough familiarity with rates and tariffs as well as painstaking care. The clerks checking the bills must be vigilant in searching for errors made unintentionally by railroad billing clerks. The carriers' freight bills are checked against copies of the bills of lading governing the shipment, so that all essential information of the bills of lading which determine the charges may be checked against the railroad billing.

Freight bill auditors in industrial traffic departments

must guard against overcharges or undercharges arising out of:

1. Errors in extending charges
2. Incorrect shipping points
3. Incorrect shipping dates
4. Disagreements between shipping and billing dates
5. Incorrect car numbers and transfers from one car to another which may affect charges by higher carload minima applying to larger cars on certain commodities which are governed by Rule 34
6. Junction rebilling errors
7. Incorrect weights
8. Application of incorrect tariffs
9. Misdescription of articles
10. Transposition of figures
11. Incorrect description of containers
12. Incorrect delivery arrangements
13. Mistakes in number of packages
14. Failure to credit prepayments,
15. Incorrect additions of special charges which should have been absorbed in rates
16. Failures of carriers to protect lowest rated routes
17. Incorrect addition of advance charges to freight charges
18. Charges for combinations of local rates higher than through rates
19. Use of actual weights in place of authorized estimated weights
20. Failures to allow for dunnage and bracing provided for in tariffs
21. Failures to absorb proper amounts out of rates as provided for by absorption tariffs

Each bill must be carefully scrutinized if the industry is to be protected. In some cases, the freight bills are given to the auditors to check, while, in others, a form is prepared which lists the charges and other data and the audit clerks are required to work out the correct charges without reference to the charges actually made by the carriers. The latter method is apt to be the more conducive to careful

AMERICAN MANUFACTURING COMPANY TRAFFIC DEPARTMENT NEW YORK, N. Y.							
(Date) .....19....							
Freight Bill No..... (Date).....							
READS:				SHOULD BE:			
Commodity	Weight	Rate	Charges	Commodity	Weight	Rate	Charges
Tariff Authority.....							
Nature of Error..... <i>Traffic Manager</i>							
Remarks By							

FIG. 31. FREIGHT BILL AUDIT FORM

original work but the additional work is felt by many traffic managers not to be compensated for by the difference in results.

If the freight bills are audited in advance of payment, the incorrect bills are often corrected with red ink and returned to the agents of the delivering carriers for changes to be made and new bills to be presented. Freight bill correction forms are used by many industrial traffic departments, in which spaces are provided for notations of the rate weight charges as they appear in the freight bills and as they should be. The nature of the inaccuracies is pointed out and the tariff authorities are shown for the rates claimed. Such forms enable the freight agents of the delivering carriers to verify the corrections asked for more easily than can be done from ink or pencil corrections on

the face of the freight bills. Such correction forms also possess the virtue of providing a carbon copy of the corrections for the use of the industrial traffic department. Forms of this sort are also used in transmitting overcharge bills to the claim department if claims are to be filed after the incorrect bills have been paid. A specimen correction form, used by the traffic department of a large manufacturing concern, is shown in Figure 31.

CHAPTER VIII

THE WORK OF THE TARIFF BUREAU

Organization

Closely allied to the rate bureau and in fact directly connected with this bureau in many industrial traffic departments, is the tariff bureau or tariff desk. Many of the larger industrial traffic departments have a tariff clerk or clerks who devote their entire time to the work of obtaining necessary tariffs, posting supplements, and arranging for the maintenance of the files of active and canceled tariff issues. The most usual practice, perhaps, is the placing of a clerk, with whatever junior assistants are necessary, in charge of the tariff files of the department, subordinate to the chief in charge of the rate bureau or desk. Tariffs are the tools with which the members of rate bureaus must work, and the proper collection and maintenance of tariff files are vital to the success of the rate work of the department. Although the supervision of the work is most commonly intrusted to an experienced rate and tariff clerk, the detailed routine work of requesting tariffs and supplements of the railroads and steamship lines, the arrangement of the tariffs in files, the custody of the files, and the maintenance of an adequate index system are usually delegated to one or several junior clerks. Provided a proper amount of expert supervision is given to the work of the filing clerks, this work is performed satisfactorily, in many departments, by comparatively inexperienced men. New employees of rate bureaus are often given several months' training in filing and supplementing tariffs, so that the experience

gained in doing this work may assist in the development of the newcomer into a satisfactory rate man. Tariff experience is the ideal training for rate work and this experience can be obtained in the industrial traffic department's own tariff-filing bureau or desk.

Selection of Tariff Issues

The tariffs which are needed by industrial and commercial traffic departments vary in kind and number with the nature of the business, the sections of the country from which raw materials are drawn, and the location of markets in which the concern sells its product or which it regards as potential markets, as well as the sections from which competitors draw their raw materials or dispose of their finished products. An industrial establishment, engaged in the manufacture of cotton waste, fertilizers, iron and steel products, or other articles, moving for the most part at commodity rates, requires an assortment of tariffs quite different from the file of tariffs needed by a concern engaged in manufacturing machinery, textiles, or other high-grade completely finished articles. In one case, the traffic department of the concern handling the lower grade bulk commodities needs to be equipped with a file of commodity tariffs governing the inbound raw materials and commodity tariffs applying to the finished product, with only a few class-rate tariffs governing the movements of certain supplies or the finished products to certain sections, where commodity rates are not applicable. The tariff requirements of an industry of this type are comparatively simple.

The department handling traffic matters for the industry manufacturing high-grade articles must be equipped with commodity tariffs applicable to the inbound traffic, as well as with class-rate tariffs governing the movement of the finished products. The establishments manufacturing a number of articles taking class and commodity ratings re-

quire, other things being equal, larger files of tariffs than concerns turning out only one product.

Another factor which influences the number and kind of tariffs which must be obtained by an industrial traffic department is the location of the sources of supply from which the industry draws its raw materials. Industries which obtain raw materials from a number of points in various sections of the United States or of the world must be equipped with a greater number and variety of local, joint, and agency tariff publications than concerns which draw most of their materials from one section or a few limited districts. In the former instance, tariffs must be obtained from a number of carriers serving the areas of production and participating in the movement of the traffic between such districts and the manufacturing center. In the latter case the tariffs of only a few carriers need be obtained. If the sources of supply are far removed from the manufacturing point, as well as scattered, a greater number of tariffs are required applying to the movement of traffic over a number of alternative routes. Joint and agency tariffs of the carriers must be obtained and carefully checked so that the industry may obtain the advantage of the best routes and lowest rates. All-rail, all-water, and rail-and-water tariff issues must be obtained and filed for the complete protection of the industry.

The number and location of the industry's actual or prospective markets assist in determining the department's tariff requirements. Industries which market their products in a few markets close at hand or in one section of the country require fewer tariffs, as a rule, than concerns which distribute their products in widely scattered markets in a number of sections of the country or world. The traffic departments of concerns doing business close to the point of manufacture or in a single district need to obtain tariffs from a limited number of lines or tariff-publishing

agencies, while the departments of industries shipping to a number of markets in many sections need a great variety of local, joint, and agency tariffs applicable to the movement of traffic over a number of all-rail, rail-and-water, and all-water routes.

The attention paid by the industrial traffic department to the business done by competitors determines in part the number and variety of tariffs needed. If the traffic manager keeps informed as to the sources of supply and the markets of his competitors, he must obtain a supply of tariffs governing their traffic as well as of those governing his own. This phase of transportation work is essential if the industry is to be thoroughly informed as to the costs of production and distribution in other concerns in the same or competitive lines of business. An analysis of rates paid by competitors on their raw materials or finished products may serve to discover markets in which the industry may take advantage of a rate disadvantage suffered by a competitor, or a market in which a rate disadvantage is suffered unjustly by the industry. The traffic manager is equipped in such cases to proceed to have the unjustly discriminatory rate corrected so as to enable the industry to meet its legitimate competition.

The knowledge of rates applying from the competitive industry as well as from the traffic manager's plant serves to guide the sales department in fixing prices for the goods marketed in different sections, so that business may be obtained by a reduction in the price sufficient to offset any rate disadvantage the concern may suffer which cannot be adjusted.

The wise and fair policy to be followed in obtaining tariff issues is to obtain all of the class commodity and miscellaneous local, joint, or agency tariffs published by rail or water carriers which are legitimately needed by the department and no others. The accumulation of unneeded

tariffs is as unwise as unfair—unwise because the unnecessary tariffs occupy valuable space and require the same amount of attention to keep them correctly supplemented and filed as necessary issues, and unfair because of the expense to the carriers. The bill for the compilation and the printing of tariffs is a large item in the expenses of the carriers which must be paid out of their incomes. The distribution of unnecessary tariffs tends to increase this already burdensome item of expense and all shippers must pay higher rates for the transportation of their goods because of this waste. The expense of tariff publications falls ultimately upon those who pay the freight charges.

The thoughtless collection of unnecessary tariffs has another unfortunate result. The carriers and the tariff-publishing agencies publish a limited number of tariffs of each kind, estimated to supply the legitimate demand for the issues. If industrial traffic departments which have no real need for certain tariffs obtain copies of such tariffs, the supply is exhausted before all the shippers having real need for the issues can be supplied. Such applicants must be informed that the supply of the needed issue is exhausted and they must wait until the tariff is reissued to obtain a copy.

The ideal of the manager of an industrial traffic department is to obtain all the tariff issues containing rates on the commodities handled from the sources of supply to the point of manufacture and from the point of manufacture to all actual or prospective markets. Tariffs should be obtained which publish rates between such points of origin and destination via the standard all-rail routes, differential all-rail routes, rail-and-water routes, and all-water routes. Express rate tariffs, parcel-post guides, territorial directories, and special service tariffs, as well as the freight rate schedules published by motor transportation companies, should be obtained if the traffic department is to be com-

pletely supplied with all the necessary freight tariff publications.

The task of selecting the tariffs needed is not an easy one and yet the job may be accurately done if a scientific method of selection is followed. The Interstate Commerce Commission requires that all carriers publish a list of tariffs to which they are parties as initial, intermediate, or terminal carriers. These lists indicate the commodities governed by each tariff to which the line is a party and the territories between which the rates published are applicable. The Interstate Commerce Commission number, the state commission number, and the issuing carrier's number are shown for each tariff.

Such official tariff lists of the carriers serving the points of origin, the manufacturing centers, and the markets in which the concern are interested may be obtained from the general freight departments of the carriers and the needed tariffs checked. The tariffs published by several or a number of roads through tariff publishing agents may be selected in the same fashion.

Tariffs applying over domestic all-water routes may be selected in much the same way. The U. S. Shipping Board requires that all-water carriers, operating in the coastwise and intercoastal trade of the United States, publish and file tariffs. The tariff rules of the Shipping Board are similar, in many respects, to the regulations for all-rail and rail-and-water carriers prescribed by the Interstate Commerce Commission. Tariff lists are required to be published by the domestic water lines, and from such lists industrial traffic managers may check the tariffs which appear to be useful.

In the case of motor lines, the Interstate Commerce Commission has not taken jurisdiction. A number of state commissions require that tariffs be published. Complete information as to the legal rates in effect over such routes

may be obtained from the state commission having jurisdiction over the line or from the officers of the line itself.

Obtaining the Necessary Tariffs, Supplements, and Reissues

Tariffs referred to in the official lists of tariffs of the carriers may be obtained by shippers or consignees of freight who have need of the tariffs upon application to the general freight departments of the carriers publishing them. Such requests may be made in the form of a verbal request or may be written. A personal visit may be desirable in case a new industry is seeking to build up the tariff files, for a personal contact with the tariff-publishing officers is of value in obtaining the desired service. Written requests, on the other hand, have the advantage of constituting a request record, which may be used to remind the person responsible for the collection of the tariff file that certain requests for tariffs have not been filled. The original requests may be followed up until all the necessary issues and supplements are obtained.

Individual letters containing the requests for tariffs are used by many traffic departments, but not by all. The time and expense involved in the dictation of each letter, the taking of the dictation by a stenographer, the transcribing of the stenographic notes, typing the letter, and the expense for stationery and mailing amount to a considerable item of expense if a number of requests are made. Form letters or post cards are used by a number of departments in requesting tariffs of the carriers. Such forms usually contain blank spaces where the numbers, kinds, and other identifying references to the tariff requested may be inserted by a clerk, making dictation and stenographic service unnecessary. The cost of obtaining tariff issues is thus materially decreased. Request forms usually are mimeographed or printed and contain sufficient space for

AMERICAN MANUFACTURING COMPANY
NEW YORK, N. Y.

TRAFFIC DEPARTMENT

File No.....

(Addressee)

(Title)

(Address and Carrier)..... New York.....19....

DEAR SIR:

Please arrange to furnish us with copies of the following tariffs issued by your line, placing us on your mailing list for supplements and reissues as they are issued.

I.C.C. No. F.D. No. Supplement to No. I.C.C. No. F.D. No.

Yours truly,

.....
Traffic Manager

FIG. 32. POSTAL-CARD SIZE TARIFF-REQUEST FORM

several tariff numbers, so that a number of tariffs may be requested in one communication. Carbon copies of the request are kept in an active tickler file so that if the tariffs are not received within a reasonable time a second request may be made. Requests for tariffs contain, usually, requests for such supplements and reissues as are made from time to time, so that the requesters may be placed permanently upon the mailing lists of the carriers for all supplements and reissues of the tariffs in which they are interested. Tariffs without such supplementary issues are valueless. Specimen post-card and form-letter requests are shown in Figures 32 and 33. Although the precise wording of such forms varies considerably, these two may be regarded as typical of the forms used in a large number of industrial traffic departments throughout the United States.

FIG. 33. LETTER-SIZE TARIFF-REQUEST FORM

AMERICAN MANUFACTURING COMPANY

NEW YORK, N. Y.

TRAFFIC DEPARTMENT

Please refer to File No.....

New York, N. Y.....19....

(Addressee)

(Title and Railroad).....

(Address)

DEAR SIR:

Please arrange to furnish us with copies of the following tariffs and supplements issued by your company, listing us for supplements and reissues that may be issued from time to time:

<i>I.C.C. No.</i>	<i>Freight Department No.</i>	<i>Supplement to No.</i>	<i>I.C.C. No.</i>	<i>Freight Department No.</i>
.....
.....
.....
.....
.....
.....

Yours truly,

.....
Traffic Manager

By

Arrangement of Files

The tariff files are placed where the rate and claim clerks can use the tariffs conveniently. The size of the file is determined, as we said before, by the nature of the business and the location and numbers of the sources of supply and markets. These factors must be considered in selecting a location for the tariff file. Space must be provided so that the tariffs are not crowded into so small a space that they cannot be used conveniently. A concern which is growing rapidly and adding new markets to its list must provide for

the expansion of the file as new tariffs are added. On the other hand, it is not wise to waste space, for space is valuable in factory office quarters as well as in down-town city office buildings. Sufficient space, therefore, must be provided to house the files without crowding or storing tariffs in emergencies in inaccessible places where they may become lost or mutilated and cause loss of valuable time in searching for them.

Large departments, in which a number of rate and claim men consult the tariffs, often divide the files between the rate and claim bureaus, the former having ready access to the effective issues and the latter to the canceled issues. In many departments the tariffs are never taken away from the files. Tables are provided in the tariff file room in front of the files so that the clerk wishing rate information may select the proper tariffs from the file and check the information at the table. This plan avoids the confusion and lost time resulting from failure to return the tariff to the proper place after it has been taken away from the file. Unless a careful supervision is placed over the files, tariffs are apt to be lost or mislaid if taken to the clerks' desks and kept there for any length of time. A tariff, like a valuable reference book, should never be taken from the files for any length of time.

The files should be placed whenever possible in a part of the office where the light is good so that the tariffs may be read without eyestrain, and a table or other surface provided for placing the tariff to be read and for making memoranda.

Filing Systems

A number of excellent filing cabinets are manufactured by office-equipment concerns, each of which is indorsed by a number of traffic managers as ideally suited for the housing of tariffs. Since many of these filing devices are but

little different from each other and each is designed to meet special needs or preferences in filing, it is impossible to recommend one device as the best for all industrial traffic departments. Each traffic manager has his own special problems in filing tariffs and these special needs must be considered in selecting the tariff-filing system to be used. The money available for the purchase of tariff cabinets or cases must be considered, for the devices vary considerably in price. There is no one type of filing device which is used to the exclusion of others in the various well equipped traffic departments. Each device has its advocates and all may be divided into four or five fairly well defined types. The important things to be considered besides cost in the selection of a tariff filing device are: whether the device will protect the tariffs from dust and mutilation, whether the device permits ready access to the tariffs, and whether the file may be readily indexed. If the filing device fulfills all these requirements, it is a good one no matter what particular style of cabinet it is.

1. *Shallow Shelf Cabinets*

Wooden cabinets, divided by partitions into a number of small shallow compartments, 14 inches in depth, 11 inches in width, and about 3 inches in height, are used by many industrial traffic departments as well as by a number of railroads and steamship and tariff departments. These shallow compartments are just large enough to accommodate several tariffs 1 inch thick or a larger number of tariffs of fewer pages. The fronts of the cabinets are equipped with latched shutters, so arranged that the lifting of the shutter in front of any compartment raises the shutters in front of all of the compartments above the one opened. Once opened, the shutters remain open until the catch is released. Cabinets are manufactured in regular sizes, containing 24, 48, or 64 compartments, although spe-

cial cabinets containing a larger number of compartments are built to order.

Tariffs are placed in filing cabinets of this sort without binders or other protection and such issues as are handled frequently are apt to become worn and mutilated. Card-board or fiber-board covers may, however, be provided for tariffs so that this objection can be overcome.

The compartments may be numbered and a record of the tariffs contained made in the filing card index under the corresponding numbers. A cross index may be kept to indicate the number of the compartment in which each tariff is kept. A double index system of this character makes the finding of tariffs an easy task. In other instances, the names and numbers of the tariffs contained in each compartment are placed on small cards which are inserted in the metallic slot on the shutter in front of each compartment. This makes a visible guide to the cabinet and obviates the necessity for a card index system. This scheme is practicable for the use of smaller departments with comparatively few tariffs, where one or at most a few men use the files. Larger departments with thousands of tariffs which are in daily use by a number of rate and tariff men find an accurate index system indispensable.

Another cabinet, similar in many respects to the ones described above, has a set of doors in front extending the whole length of the cabinet. A partition divides the cabinet in half and a number of shelves are provided to accommodate the tariffs. These shelves may be increased or decreased in height by placing the shelves in grooves cut in the center partition and in the sides of the cabinet. The shelves may be numbered or labeled just as the shutter fronts are numbered or labeled in the case of the other type of cabinet, and similar index systems prepared. Cabinets of this sort are manufactured in standard sizes to accommodate from 150 to 200 shelves, each sufficiently

large to hold several tariffs. The shelves are 13 inches deep, and the cabinet $21\frac{1}{2}$ inches in width inside. This width is divided into halves by the horizontal partition, making each compartment about $9\frac{1}{2}$ inches wide.

2. *Drop-Front Drawer Filing Cabinets*

Another popular type of filing cabinet is the drop-front cabinets, which are provided with a number of drawers varying from 2 to 4 inches in depth. Each drawer is equipped with a front which drops when the drawer is pulled forward, so that the entire contents are revealed. Only a few tariffs are contained in each drawer so that it is not necessary to leaf through a number of tariffs to locate the one needed.

Each drawer front is equipped with a metal slot in which a card indicating the tariffs contained may be inserted. Each drawer may be numbered and a card index prepared as in the case of the compartment cabinets. The drawers, like the compartments, are made just large enough to hold several 8 inch by 11 inch tariffs.

Tariff cabinets, whether of the compartment or drawer style, have several advantages. In the first place, the cabinets are nearly dust proof and the tariffs are kept reasonably clean and legible. Another advantage is that the tariffs are always accessible. A card index system or a careful posting of the issues contained makes it unnecessary for the tariff clerks to sort over a large number of tariffs to find the needed one. Another advantage is the appearance of such filing devices. Similar cabinets may be used in filing claim records and other departmental data, so that all the records may be kept in a uniform type of cabinet. An office equipped with cabinets of this sort has a decidedly well furnished appearance and for this reason many industrial traffic departments prefer this type of cabinet.

3. *Tariff Boxes*

Boxes made of cardboard or fiber board, 12 $\frac{1}{4}$ inches in width, and 3 $\frac{1}{2}$ inches in depth, are sometimes used for filing tariffs. These boxes, which resemble correspondence transfer cases, are provided with a hinged lid which clasps shut when closed and is opened by pressing the clasp. These boxes, like the cabinet compartments or drawers, are large enough to accommodate several tariffs and are numbered or the tariffs contained are indicated on each box for direct reference. The boxes are placed on shelves similar to book shelves or in special cabinets equipped with shelves designed to accommodate the boxes.

4. *Loose-Leaf Binders*

Heavy board binders, large enough to inclose several 8 inch wide by 11 inch long tariffs, are manufactured for the use of industrial as well as railroad and steamship traffic departments. The binders come in a variety of standard sizes from 2 inches up to 4 inches in thickness. The covers open out flat to receive the tariffs through which holes are punched along the binding edges. Binder posts are inserted through the holes and locked by means of a spring clasp so that the tariffs are held securely in place. The binder locks can be opened so that any tariff can be withdrawn from the binding by releasing the spring clasp.

A number of roads and tariff-publishing agents punch their tariffs so as to have them fit these binders. For tariffs not so prepared by the issuing road or agency, a punch especially designed for tariffs may be obtained and the tariffs may be punched in the office of the industrial traffic department using the loose-leaf binder filing system.

Tariff binders have one great advantage in that they protect the tariffs from mutilation in handling. The heavy board cover acts as a permanent back for the paper-bound tariff and effectively preserves its life. A disadvantage of

the device is that the large binders containing several tariffs make a rather unwieldy volume. The binders are widely used, however, and are indorsed by many industrial traffic departments as well as by the rate and tariff departments of a number of rail-and-water lines.

5. *Vertical Files*

Vertical wooden or steel correspondence-filing cabinets are used by many industrial traffic departments to house their tariffs. The filing drawers are divided into a number of compartments, large enough to accommodate a number of tariffs, by heavy guide cards. These guides are numbered and a card index system prepared or the names of the tariffs are placed directly on the guide tabs so that the tariffs may be located directly from the tabs. The tariffs are placed vertically in the file.

Vertical files for tariffs are often used in smaller traffic departments while a complete file of tariffs is being built up. The filing cabinets may be used, after the collection is complete, for correspondence filing, and a new tariff-filing cabinet or other device used to house the tariffs.

Small collections of tariffs may be very well housed in vertical files. The slots on the front of the drawers may be used to indicate the tariffs contained within the drawers and a set of guide cards may be used to subdivide the tariffs into a number of groups. The names of the roads or agencies issuing the tariffs and the I. C. C. and freight department numbers of the tariffs may be shown on the guide cards so as to make a card index system unnecessary.

Arrangement of the Tariffs

After the tariffs needed have been obtained and the filing device determined upon, the problem of the arrangement of the tariffs in the files remains to be solved. A number of representative industrial traffic departments, engaged

in a variety of lines of business, some maintaining comparatively small files of tariffs as well as others having large numbers of tariffs, use the system of arranging the tariffs of each road and each agency, alphabetically, according to the name of the road and freight tariff association. The arrangement has the advantage of being the most logical order. Listing agency tariffs under the name of the agent is not recommended because the file must be rearranged whenever the traffic association changes agents. Tariffs of the following railroads and associations are arranged in this order:

1. Atchison, Topeka and Santa Fe Railway
2. Atlantic Coast Line Railroad
3. Baltimore and Ohio Railroad
4. Baltimore Steam Packet Company
5. Bessemer and Lake Erie Railroad
6. Central Freight Association
7. Delaware and Hudson Company
8. Great Northern Railway
9. International Great Northern Railroad
10. Lehigh Valley Railroad
11. Louisville and Nashville Railway
12. New England Freight Association
13. Pennsylvania Railroad
14. Southern Freight Association
15. Southern Railway
16. Terminal Railroad Association of St. Louis, Mo.
17. Transcontinental Freight Association
18. Trunk Line Freight Association
19. Wabash Railway
20. Zanesville and Western Railway

Further subdivisions are made of the tariffs of each issuing road or association, alphabetically according to kind of tariff. Thus, the tariffs of the Southern Railway are divided into groups of class, class and commodity, general commodity, specific commodity, and miscellaneous tariffs. Within these groups the tariffs are arranged numerically

according to their I. C. C. number. This method corresponds to the system prescribed for the guidance of rail carriers by the Interstate Commerce Commission in their Tariff Circulars. The same I. C. C. number is never assigned to more than one tariff so that confusion is impossible.

The tariffs of the Southern Railway would be filed, under this system, as follows:

SOUTHERN RAILWAY

CLASS TARIFFS

- I. C. C. 1617
- I. C. C. 1724
- I. C. C. 7316
- I. C. C. 9325

CLASS AND COMMODITY TARIFFS

- I. C. C. 176
- I. C. C. 234
- I. C. C. 792

GENERAL COMMODITY TARIFFS

- I. C. C. 123
- I. C. C. 267
- I. C. C. 673
- I. C. C. 763
- I. C. C. 1068

SPECIFIC COMMODITY TARIFFS

- I. C. C. 110
- I. C. C. 121
- I. C. C. 432

MISCELLANEOUS TARIFFS

- I. C. C. 1077
- I. C. C. 1380
- I. C. C. 1400
- I. C. C. 1539

The Tariff File Index

Larger files must be properly indexed if the needed tariffs are to be located in the files. Smaller files may be success-

fully kept without indexes if the names of the issuing roads or associations and the kinds and numbers of the tariffs contained in each receptacle are shown on the outside of the compartment or case, but this is impracticable with large collections of tariffs. Many industrial traffic departments arrange and index their files after the manner prescribed by the Interstate Commerce Commission for the use of carriers and used by the Commission in their own files which contain copies of every tariff issued by a road or association under the Commission's jurisdiction.

Rule 11 of Tariff Circular 18 A provides that :

Each carrier shall publish under proper I. C. C. number, post and file a complete index of tariffs which are in effect and to which it is a party either as an initial or a delivering carrier. Such index space shall be prepared *in sections*, as follows, and shall show:

- (a) I. C. C. number;
- (b) Carrier's own number;
- (c) Index number;
- (d) Initials of issuing road or agent;
- (e) Issuing road's or agent's number;
- (f) Character of tariff or description of the articles upon which it applies;
- (g) Where tariff applies from;
- (h) Where tariff applies to.

First Section.—A list of all the tariffs as to which the carrier is an initial carrier. Commodity tariffs to be entered alphabetically under the names of commodities or principal commodities. Tariffs applying to different groups of the same commodity must be grouped together; thus, "Lumber—hardwood," "Lumber—yellow pine," etc.

Following the specific tariffs, the class and commodity tariffs and the class tariffs. Under each of these heads the application of the tariffs will be described by alphabetical arrangement of the points or territory from or to which they apply, in either the "from" or "to" column.

Under the head of "Miscellaneous Schedules" will follow list of schedules, such as billing books, classifications, exception sheets, switching tariffs, terminal charges, etc., each entered in alphabetical order.

Second Section.—List of all tariffs under which the carrier is a delivering carrier arranged alphabetically, by names of issuing carriers or agents, with the items arranged by commodities and classes under each of such carriers or agents, as prescribed for the first section. If the carrier so desires, lists of tariffs under which it is an intermediate carrier may be included in this section, provided those tariffs under which it is a delivering carrier, or an intermediate carrier, or both, are indicated.

Third Section.—A complete list of the numbers of tariffs of its own I. C. C. series arranged in numerical order.

If any changes are made, the index must be revised to date, either by reissue each month or by supplement each month and reissue every twelve months. If supplements are used they must be numbered consecutively, must be constructed in accordance with specifications as to construction of index and show additions, changes and cancellations made in index or cancelled supplements thereto.

Industrial traffic departments may change these arrangements slightly to meet their special requirements on such index arrangements as shown below. The tariffs are segregated alphabetically by names of roads and associations (not agents) issuing them, in the following order:

- I. *Class Rate Tariffs.*—Tariffs naming class rates only.
- II. *Class and Commodity Tariffs.*—Tariffs naming both class and commodity rates, specific or general.
- III. *General Commodity Tariffs.*—Tariffs naming commodity rates on a variety of commodities too numerous to list on title page.
- IV. *Specific Commodity Tariffs.*—Tariffs applying on a single commodity, or on a group of allied commodities, such as iron and steel articles, grain and grain products.
- V. *Miscellaneous Tariffs.*—Tariffs governing special and accessorial services and charges including:

- | | |
|------------------------------|-------------------------------|
| | (a) Cleaning and disinfecting |
| | (b) Cooperage |
| | (c) Dunnage |
| | (d) Elevation |
| 1. Allowances, including all | (e) Floor racks |
| rules and regulations | (f) Grain doors |
| governing diminution of | (g) Leakage and shrinkage |
| transportation charges | (h) Lining |
| paid to or allowed by | (i) Peddler car service |
| carriers to shippers or | (j) Return of empty cars |
| consignees of freight | (k) Spotting |
| | (l) Staking |
| | (m) Stoves and caretakers |
| | (n) Wharfage |
| | (o) Yardage |
2. Demurrage
 3. Drayage and cartage
 4. Industrial allowances
 5. Lighterage
 6. Reconsignment
 7. Switching
 8. Track storage
 9. Transit privileges
 10. Trap and ferry car service
 11. Warehousing

Inactive Files

Tariffs which have been supplemented to the legal limit, set by the Interstate Commerce Commission, are reissued and the old issues canceled. These *passé* tariffs are still useful to the industrial traffic departments' claim men to be used to support overcharge claims or to defend undercharge claims. Canceled tariffs, therefore, must be kept until there is no possibility of their being of use for such purposes. After that time has been reached the old issues may be disposed of to make room for other tariffs.

Tariffs which have only recently been canceled are usually filed in the same fashion as the effective issues but are often separated from the live issues and placed in special

files where the members of the claim bureau can use them conveniently. The same system of indexing is used. Special index files, either book or card, are made for the tariffs used for this purpose.

After the legal time limit within which claims may be filed against the carriers has been reached and no new claims can be entered, the canceled issues are usually removed from the files to make room for more recently canceled tariffs. The old issues are placed in permanent storage places so that they may be found if needed to support suits. It is not necessary that cabinets or other such filing devices be used for the storage of these old tariffs, for they may never be used. Any reasonably dry, fire-proof, and clean place may be used. Packing boxes are often used to store them in, care being exercised to see that a label on the boxes indicates the tariffs that are inclosed so that it is not necessary to search through a large number of unclassified tariffs to find the one needed. Many industrial departments store their old tariffs in this way until the need for space makes it expedient that they be disposed of. The importance of preserving canceled issues cannot be overemphasized, as important information of value in preparing or defending claims or legal actions is often contained in these old issues. Tariffs often are difficult to replace if lost or destroyed and this is especially true of canceled issues. It may be and often is impossible to obtain possession of canceled issues and the lack of them may cause considerable inconvenience and even loss. One claim prepared and collected from the data contained in an old tariff may compensate the department for years of storage of thousands of canceled tariffs.

Book Index System

An index book or a card index file is usually prepared by industrial traffic departments showing the I. C. C. num-

INDUSTRIAL TRAFFIC DEPARTMENT'S TARIFF INDEX
(Book Record)

I.C.C. No.	Carrier's No. or Agent's No.	State Commission No.	Applying on	From	To	File No.
ATLANTIC COAST LINE						
43.....	177	V.R.C. 3267	Classes	Carolina Territory	South- eastern Points	21 A
BALTIMORE AND OHIO RAILROAD						
17.....	1068	.....	Iron and steel	Chicago	Illinois and Michigan Points	29 A
36.....	1618	.....	Lumber	West Vir- ginia	Pennsyl- vania Points	30 B
376.....	5362	.....	Classes	Ohio Points	Local B. & O. Points	23 A
BUFFALO, ROCHESTER AND PITTSBURGH						
2538.....	3216	P.S.C. Pa. 376	Iron and steel	B.R.&P. stations	Pennsyl- vania Points	36 C
1412.....	197	P.S.C. Pa. 972	Classes and Commod- ities	B.R.&P. Points	Reading Co. Points	37 C
CENTRAL FREIGHT ASSOCIATION						
A1377.....	4R	C.R.C. 1736	Classes and Commod- ities	C.F.A. Points	Trunk Line Points	38 A

FIG. 34.

The similarity between this method of indexing and that prescribed by the Interstate Commerce Commission for the use of carriers may be noted by comparison with the tariff index shown opposite, used by a carrier which is a party to the tariffs described in the index.

ISSUING CARRIER'S LIST OF FREIGHT TARIFFS

I.C.C. No.	Issuing Road or Agent No.	Issuing Road or Agent	Applies on	From	To
1077..	1-S	Countiss	Class and commodities	Eastern Shipping Points	Pacific Coast Points
1068..	4-P	Countiss	Class and commodities	Eastern Shipping Points	Oregon, Washington, British Columbia, and Wyoming
1339..	33-R	Leland	Packing house products	Arkansas, Texas, etc.	Eastern Points
1418..	5-O	Leland	Class and commodities	Hagerstown, Md., New York and Philadelphia and other Eastern Points	Arkansas, Oklahoma, and Missouri
1380...	3-L	Leland	Exceptions to Western Classification	Traffic from Oklahoma Points	Traffic destined to Oklahoma Points
1400..	9-I	Leland	Class and commodities	Atlantic Seaboard Territories and Virginia Cities	Oklahoma
110...	26	Sedgman	Class and commodities	Atlantic Seaboard Territory	Colorado, New Mexico, and Wyoming
326..	16-H	Sedgman	Class and commodities	New York and Atlantic Seaboard Territory	Texas
372..	1-E	Sedgman	Class and commodities	New York and Atlantic Seaboard Territory	Louisiana, Arkansas, and Oklahoma Points
29..	11-A	Southern S. S.	Class and commodities	Philadelphia, Pa.	Houston, Tex.
111..	19-C	Sedgman	Class and commodities	Atlantic Seaboard Territory	Utah
46...	9-R	South-western R. R.	Class and commodities	Texas Points	Pennsylvania R. R. Points

FIG. 35.

This method of indexing is prescribed for the carriers by Rule 11 of Tariff Circular 18A of the Interstate Commerce Commission.

ber, the carrier's or agent's number, the state commission number, the articles or commodities upon which the tariff applies, the territory to which it applies, and the number and subdivision of the file in which the tariff is to be found. The book is arranged so that sufficient space is allowed for all the tariffs of each road or agency or file to be listed alphabetically by roads or associations.

This method of indexing is preferred by many traffic managers to the card index system which is the other generally used system. The objection that the book record is not flexible enough to care for the rapidity with which tariffs are reissued is met by using loose-leaf books, from which pages may be taken and corrected and returned to the file without disturbing the rest of the book. The index volume is frequently the same size as the tariffs so that it can be filed in the front of the tariff-filing compartment or placed with the bound tariffs on the shelves used for tariff storage.

Card Index Systems

Card index systems find favor in a number of industrial traffic departments. The same information as is shown on the pages of book indexes is shown on cards kept in a card index case. The usual practice is to devote one or several cards, as may be necessary, to each issuing road or agency. The cards are filed alphabetically, according to the names of the roads or traffic associations, and the individual tariffs are subdivided into general commodity, specific commodity, class rate, and miscellaneous groups, just as in book index systems, or arranged numerically according to I. C. C. numbers.

A typical tariff index card is shown in Figure 36.

Book or card index records are equally effective provided they are accurately kept. The essential features of an effective index system are simplicity and accuracy; with these

*Railroad, Bessemer and Lake Erie**Issuing Agent, C. T. B. B. & Le. R. R.*

I.C.C. No.	Tariff No.	Box No.	Index No.	Supplements	Cancelled
1367	134	21	4	1, 2, 3	
2468	137	21	7	3	
3796	238	21	9	.....
4227	463	22	2	1	
5672.....	597	22	3	1, 2	
7634.....	773	22	4	1, 2	

FIG. 36.

almost any system is successful, without them no system can be. The system of arranging tariffs alphabetically by roads and agents is effective because it is sufficiently flexible so that the number of tariffs kept on file may be increased or decreased without changing the filing or indexing system.

The preparation of a proper tariff filing and indexing system, in the last analysis, is a task which must be approached by the industrial traffic manager in the light of his special experience in his concern's business. Aside from minor variations dictated by the special problems presented by a particular business, or influenced by personal preference, a good tariff-filing and indexing system adheres to the following specifications:

1. It should be simple and easy to understand.
2. The index should be kept accurately and up-to-date.
3. The file should be housed so as to protect the tariffs.
4. The tariffs should be concentrated at a convenient place.
5. The place where the file is kept should be well lighted and equipped with a reading table.
6. A uniform filing cabinet should be adopted so that units may be added as the file increases in size.
7. Filing, indexing, and the posting of supplements should be attended to by a capable tariff or rate clerk.
8. The whole filing system should be carefully supervised by the traffic manager.

Revising the Tariff File

The labor and expense of collecting and maintaining a tariff file will be largely wasted unless the file is kept thoroughly up-to-date. Constant revision is necessary to be sure that all the needed tariffs have been obtained and that all supplements have been posted. Canceled issues must be eliminated from the files so that correct rate information may be available for the rate work of the department. Eternal vigilance is the price which traffic departments must pay for safety in the matter of rates.

At the time tariffs are requested of the carriers, it is customary for managers of traffic to request that the name of the concern be placed on the mailing lists of the carriers for such supplements and reissues as may be published from time to time (see Figs. 32 and 33). Despite this precaution, it sometimes happens that a concern is omitted from the mailing list for an issue or several issues due to error on the part of the tariff-distribution forces of the carriers. One or several supplements or reissues may fail to reach the requester, with the result that incorrect rate information may be used. The rapidity with which rate changes and tariff revisions are made indicates how necessary it is that traffic departments be careful in keeping their tariff files up to date. As long ago as 1913, Commissioner Prouty of the Interstate Commerce Commission told the Chicago Traffic Club of an investigation made by the Chief of the Tariff Bureau of the Commission as to the changes made in freight, passenger, and express schedules in a ten-day period beginning October 22, 1912. In this period some 15,000 advances and 29,000 reductions were made in freight rates; 60,000 advances and 86,000 reductions in passenger schedules, and 4,000 advances and 32,000 reductions in express tariffs.

The men in charge of the industrial department's tariff files must assure themselves constantly that all the issues

FIG. 37. FORM LETTER FOR TARIFF DATA

AMERICAN MANUFACTURING COMPANY

NEW YORK, N. Y.

TRAFFIC DEPARTMENT

Please refer to File No.....

New York, N. Y.....19....

(Addressee)

(Title and Railroad or Agency)

(Address)

DEAR SIR:

We have in our files copy of your tariff No., I.C.C. No.....

If this tariff is still in effect, please furnish us with effective supplements; if it is canceled, please furnish us with superseding issue and place our name on your mailing list for supplements and reissues.

Yours truly,

.....
Traffic Manager

By

needed are in the files and that all effective supplements have been received. One method of doing this is to check the issues on file in the department against the official lists of tariffs published periodically and supplemented monthly by the carriers.

The tariffs on file with the railroad agent at the place in which the industrial establishment is located may be examined from time to time as another precaution. These agency tariff files are kept completely supplemented by tariffs sent by general freight departments of their respective roads.

A third method of checking the department file for accuracy is the practice of requesting the local agents of the rail lines delivering freight to the industry, to insert a notation of the tariff authority, supplement, and effective date on all incoming freight bills. A check of this sort tends to reduce overcharges as well as to give the traffic

department an opportunity to be certain all tariffs and supplements needed have been obtained.

Still another means of keeping the tariff files up-to-date is used by a number of industrial traffic departments. Form letters are addressed to the general freight departments of rail and water lines and to tariff-publishing agents of such carriers, asking if certain specified tariffs are still in effect and if they are, that effective supplements be furnished. If the tariff or tariffs referred to have been canceled, a copy of the superseding issue is requested and a supplementary request is made that the name of the industry be placed on the mailing list of the carriers for amendments and reissues. A typical letter of this type is shown in Figure 37.

Any one or all of these devices used by traffic managers to obtain reliable rate information indicates how much attention is paid to this detail by industrial traffic departments.

CHAPTER IX

ROUTING SHIPMENTS

Routing in the strict sense in which the term is used is the furnishing of full, written instructions by shippers to the carriers over the routes of which particular shipments are to be transported. If the route is a joint route made up of a number of connecting lines, routing by the shippers includes the selection of the particular roads by which the goods are to travel beyond the lines of the carriers that originate the movements. Numerous transportation route combinations of services and of carriers with rates, service schedules, and services are available between points of shipment and destination. For this reason, the careful selection of routes is important to shippers and carriers alike. The selection of one initial carrier rather than another, the choosing of a rail-and-water route rather than all-rail, a standard rail route rather than a differential all-rail, rail-and-water, or all-water route is the beginning of routing—the initial step. Routing includes the orders given to the originating carriers as to the intermediate and delivering carriers to be used, and in some instances, the selection of junction points through which freight is to move.

The most economical and dependable routes between given points of origin and destination can be learned best by actual experience, but experimentation without fundamental knowledge of charges, sorts of routes, and the rules governing routing is costly. A knowledge of rates over the different routes available and of the relative rights of car-

riers and shippers under the Interstate Commerce Act as interpreted by the rulings of the Interstate Commerce Commission, are necessary to select routes efficiently. No treatise upon the subject of routing can hope to indicate the routes that are available between shipping and receiving points throughout the United States. The principles that govern an intelligent selection of routes can, however, be discussed even in the space available in this discussion.

The Problems of Routing

Shippers of freight often have the choice of many alternative routes. A shipper often has the choice of shipping by coastwise or intercoastal steamship, by canal or inland water line, by railroad, by motor truck, by express, by parcel post, or even by airship or aëroplane, although shippers in the United States are restricted in the use of air carriers because relatively little progress has been made in commercial aviation in this country. Shippers and consignees generally are limited in the selection of routes only by the locations of the shipping points and destinations, by the character of the merchandise, and by their own wishes as to the class of service to be used.

After the class of service has been selected, whether rail, water, motor, express, or parcel post, there remains the problem of working out combinations of these different carriers or kinds of service to make through routes. Traffic departments that have given careful study to routing problems have been successful in shipping their freight more efficiently at much lower charges by combining different types of carriers into through routes.

The third consideration in routing, after the type of service has been selected and combinations of types of service into joint through routes, is the selection of the actual carriers that are to haul the freight. If, for example, an all-rail route is selected, the traffic department

must decide which of several competing or connecting carriers are to participate in the haul. All three of these considerations are included in the term routing as used by industrial traffic managers.

The great field that is offered in routing can be appreciated by a brief reference to the classes of that service available between Eastern shipping points and points in Central Freight Association Territory. A shipper may ship freight from New York to the Middle West over any one of the following routes or services:

1. Standard all-rail routes
2. Differential all-rail routes
3. Standard rail-and-lake routes
4. Differential rail-and-lake routes
5. Canal-and-rail routes
6. Canal-and-lake routes
7. Standard ocean-and-rail routes
8. Differential ocean-rail-and-lake routes
9. Express service
10. Parcel-post service
11. Motor transportation service
12. Air transportation service

If the various combinations of classes of service are considered and the almost endless variations of combinations included, the list of routes available mounts to the hundreds.

A table of present routes and bases for rates via standard and differential routes is shown on pages 200 and 201.

Selection of Routes By Industrial Traffic Departments

Separate routing bureaus are not usually found in industrial traffic departments. The many and varied considerations that enter into the selection of routes make the work so important that it is usually supervised directly by the manager of the traffic department or by his principal as-

5	Canal-lake-and-rail	New York	St. Paul	Trans-Marine Line up Hudson River and through N. Y. State Barge Canal to Buffalo, thence Great Lakes Transit Co. to Duluth-Soo Line	26½ - 22 - 16 - 10-9-6½ cents per 100 lbs. over the canal-and-lake rates to Duluth, which are 13-11-9-5-4 under the rail-and-lake rates	....	\$1.42
6	All - water (via river-canal-and-lakes)	New York	Chicago	Trans-Marine Barge Line via Hudson River and N. Y. State Barge Canal to Buffalo, thence via Great Lakes Transit Co.	15-11½-8-6-6-4½ under the standard rail-lake rates	....	\$1.14
7	Ocean-and-rail	New York	Chicago	Old Dominion S. S. Co. to Newport News, Va., and Chesapeake and Ohio Ry. beyond Central Vt. car ferry to New London, Ont.,—Central Vt. Ry. to Rouses Point —Grand Trunk Ry. to Depot Harbor—Canada Atlantic Transit Line to Chicago	13-11-9-5-5-4 8-6-5-4-4-3 cents per 100 lbs. under the standard all-rail rates	....	\$1.29* \$1.34†
8	Differential ocean-rail-and-lake	New York	Chicago			....	.....

* When lake navigation is open.

† When lake navigation is closed.

sistant. The heads of the rate, tariff claim, tracing, and expediting bureaus of large industrial traffic departments are usually consulted as to the desirability of routes. Each specialist contributes his particular knowledge as to the advantages and disadvantages of a route so that the routes finally selected may be the best suited for the movement of the traffic between the points of origin and destination involved.

Standing routing directions are often issued as a result of studies of available routes. These routes are used if no instructions to the contrary are issued by the manager of the department in particular cases and no other instructions are received from the shippers or consignees of the goods. These routing instructions are given to the purchasing and sales departments, to suppliers, and to the members of the rate, claim, tracing, and expediting bureaus as standing routing orders. Card indexes, similar to those for rates, are frequently used to show preferred routes. Very often the same card index system that is used for rates is also used to show the routes. Large movements of traffic or urgent shipments are usually specially routed by the industrial traffic manager after consultation with his subordinates and with the traffic representatives of the carriers that are interested in the traffic.

Routing Considerations

The purposes of routing freight vary considerably with the particular conditions that are uppermost at the time of shipment. If the shipper's main object is to obtain the lowest freight charges possible he seeks to route his freight over the cheapest route. The most important consideration in a particular shipment may, however, be promptness of delivery, in which case the shipper selects the route which he believes will put his shipment through to destination in the shortest period of time. The points of greatest impor-

tance in other shipments may be the condition of the freight on delivery, the availability of transit arrangements or other special services on the lines of the carriers forming one route which are not available over others; or again, it may be promptness of a particular carrier in the settlement of freight claims, or other considerations of this nature. The existence of embargoes often influences the decision of shippers in selecting routes. Shippers may select initial, intermediate, or terminal carriers in a through route because of the close business affiliations between such lines and the shippers or personal connections between shippers and representatives of the carriers. The personal equation has and perhaps always will be an important consideration in routing freight.

There is no hard and fast rule that can always be followed in routing freight. A certain route may be best for one shipment while another route may be desirable for another shipment between the same points. Different routes may be selected for different commodities, for different destinations, or at different times, depending upon circumstances.

Routing to Save Charges

When freight is routed in order to obtain the lowest rates, shippers and consignees must consider the entire freight charge and not merely the line haul rate. The freight rate is obviously an important item, but consideration must be given to cartage charges, insurance, and other cost items. It is therefore necessary when shipping to particular destinations, to obtain the rates in effect via all the routes available and all additional charges to which the shipment may be subjected.

Charges via Differential Routes

The statement that competitive routes charge uniform rates is correct only in the general sense that rates for the

same class of transportation service are interdependent and are often made with reference to other rates. They are not, however, identical via every all-rail, rail-water, or all-water route between the same points. The routes over which the freight rates are lower than the standard all-rail rates are frequently described as differential routes because such carriers are permitted by the Interstate Commerce Commission to make rates that are lower by fixed differentials than the standard rates in order that they may, in normal times, obtain a fair share of the traffic. The mileage via the differential routes may be longer and the service that they offer less prompt than that of standard lines, but the freight rates may be sufficiently attractive to shippers who desire cheap transportation rather than the more prompt service.

Cartage Charges

The total transportation expenses which must be considered when selecting a route to save freight charges includes all charges that are assessed against a freight shipment. Especially important among such charges are the cartage or trucking charges for movement to and from the stations of the carriers at the points of origin and destination. The shipper's or consignee's plant or warehouse may be located more conveniently to the depot of one initial or delivering carrier than to that of another. The factory or warehouse of the shipper or consignee may be connected directly with the rails of one carrier by a private siding while cartage may be necessary to or from the local freight station of others. In comparing the relative freight rates via a standard-rail and a differential rail or water route it is important that consideration be given to any additional cartage charges which may be required to be paid if the goods are shipped over the route with the lower rate. The lower differential freight rate when cartage charges are

added may exceed a standard rate if private sidings connect the standard line with the shipper's or consignee's plants. Apparent differences in freight rates between the all-rail and the differential routes may be reduced greatly if not entirely discounted.

Marine Insurance Premiums

Another factor that often tends to offset the advantage of the lower rate of a rail-water or all-water route as compared with a standard all-rail route is the cost of marine insurance. As compared with the liability of a common carrier by railroad, the liability of a water carrier is very limited. Certain rates that are published by carriers forming differential rail-water routes are "insured rates" and in such cases the liability of carriers party to such rates is the same as that of all-rail carriers. Other rates are not insured and the shipper must either make arrangements for the carrier to insure the goods under the carrier's open policy or arrange to place insurance on the goods himself.

Either method of obtaining insurance protection means a slight increase in the transportation bill. This difference is sufficient, in some instances, to deter a shipper from using the route. Tariffs publishing the through rates participated in by rail-and-water carriers stipulate whether or not the rates are insured. Care must be exercised by the users of such routes to learn the status of all-rail and water routes, in this regard. One lost uninsured shipment would pay many marine insurance premiums.

Special Service Charges

The total freight charges via different lines may also be affected by special charges for switching, lighterage, elevation, milling, or fabrication-in-transit or other in-transit services or privileges, or for refrigeration, demurrage, or storage. Should a shipment be destined to an overseas'

export market the inland shipper is concerned not only with inland freight charges to the ports but with the freight rates of the ocean carriers serving the different ports, with trans-shipment charges, and with whatever other port charges are assessed against ocean cargoes which are not included in the freight rates of the inland carriers or absorbed by the rail or ocean carriers.

If the freight is unrouted by the shipper, the carrier to whom it is delivered is obligated to forward the freight over the cheapest route available over that line and its connections. There may be a cheaper route available over another initial line and its connections but the carrier to whom the freight is delivered is not obligated to surrender the freight to its rival initial line in order to give the shipper the absolute minimum rate. The carrier is not required to select rail-and-water or all-water routes, even though the rates over such routes are lower than those applicable over the carrier's own line.

The rates applying over the various available routes having been learned, shippers may choose the routes on the basis of their merits.

Routing for Prompt Service

If promptness in delivery is of greater importance than the freight charges, different considerations will control the shipper in selecting a route. In normal times, shippers who have used the services of the various routes that are available know from their experiences which route ordinarily gets the freight through in the fastest time to certain destinations. Other shippers, however, need to examine the different routes in order to route their shipments properly. Abnormal traffic conditions may nullify in a measure the value of past experience.

The relative directness of the routes available and the kind of transportation service provided by each are con-

sidered in such cases. Comparisons are made of the terminal facilities of the various lines, and the absence or presence of freight congestion.

Transfers and Interchange

The number of transfers, if any, and the manner in which transfers are made may also be a controlling factor. At some transfer points the transfer is made directly from carrier to carrier at a common platform; at others, the freight is handled by switching cars from the line of one carrier to another; at still other transfer points, teams or trucks are used to effect interchanges of traffic; while in some cases transfers are made by lighters or other harbor craft. Certain of these methods require more physical handling of the freight than others, and unless the transfer is direct or special arrangements such as special switching or the like have been made, unexpected delay in transfer may result if the cars arrive too late for regular interchange movements. The transfer may be delayed until the following day unless the car arrives early or special arrangements are made.

Fast Freight and Package Car Services

In routing for promptness in delivery, the shipper is also interested in the "time" or "preference" freight services, in the availability of through package cars, in the character of services beyond the transfer points, and in the ability to ship or deliver over private sidings.

Frequently the best available route for carload freight may not be the most dependable or expeditious route for less-than-carload freight, and the reverse is often true. The delays in transit to less-than-carload freight arise largely out of congestion in and around terminals and transfer points. This delay is avoided in a great majority of cases by the consolidation of less-than-carload shipments into

through carloads billed through to the destination city rather than to a transfer station. In order that sufficient tonnage of package freight to make this possible may be obtained, a number of railroads make up through merchandise cars to principal centers or important junctions several days each week from certain stations in the larger cities. The carriers maintaining service of this sort publish "Sailing Day Guides" or "Package Car Guides" showing the points for which such through cars are booked and the days on which through cars are forwarded for different destinations. Information concerning the services afforded by such through cars may be obtained by the shipper from the agents of the carriers serving him.

Terminal Services at Ports

In overseas' shipments to or from interior points, the shipper must learn the arrangements that he is able to make with freight forwarders or export agents, or other port representatives, unless the goods are shipped on a uniform through export bill of lading. He must likewise arrange to obtain the kind of ocean transportation service he desires, whether line or tramp vessel service. The exporter or importer is also interested in the transfer facilities at the various ports. All these things must be arranged for in advance of shipping in order to avoid delays and extra handling expenses at the ports.

Miscellaneous Routing Considerations

In shipping perishables, fragile articles, or live stock, an important routing factor is the condition of the goods on arrival. The risk of loss or damage is great in this class of freight. Since, in the shipment of perishable goods and live stock, there is a close connection between time in transit and condition at delivery, the various considerations mentioned in connection with quick service are again appli-

cable. In so far as perishables are shipped in refrigerator cars, the icing service at the shipping point and en route is an important consideration.

Fragile articles are not affected so directly by the time in transit for they may not be intrinsically perishable. Some of the same routing considerations apply as in the case of perishable shipments. The condition of fragile goods upon delivery depends, in part, upon the number and manner of making transfers, the care taken in handling them at transfer stations and freight houses and in loading into and unloading from cars, the amount of cartage necessary, and similar factors.

The Claim Policy of the Carriers as a Routing Consideration

When freight is lost, delayed or damaged, the owner is interested in the promptness with which his freight claims are settled. This is frequently an important routing consideration. Even more important than the payment of claims is the elimination of causes of claims. The reduction of losses and damages to a minimum by having freight arrive in perfect condition is obviously to the advantage of both the carrier and the shipper or consignee.

Transit Service and Other Services

At times the shipper's ability to obtain certain transit services or privileges is a routing factor. Arrangements for milling, fabrication, or storage in transit are sometimes available on certain lines while the same services are not available over other lines. Reconsignment or hold points may be favorably located on certain roads. The availability of peddler car services or of switching services, and in fact of any special services, may in a particular shipment become a deciding factor in the selection of routes.

To obtain effective results the right of routing freight must be exercised carefully by shippers or consignees. The

issuance of routing instructions carelessly or without the benefit of reliable information may discount the advantages of special arrangements that the carriers have made without obtaining the results desired. Freight routing is one of the most important functions performed by industrial traffic managers.

If the shipper or consignee is not certain of his ground, it is wiser to deliver the freight unrouted to a carrier, and have the carrier route the freight beyond the initial line at the lowest rate, than to specify a route without being sure the rate is the lowest available, unless of course other factors outweigh cost as routing considerations.

The Shipper's Rights in Routing Freight

The shipper or owner of the goods, of course, has always had the right to select the class of service and the carrier to which he wishes to give his freight for transportation when several initial lines of the same class are available. The shipper may select from among the railroads serving the point of shipment, or from among the various water, electric, express, or moter transport lines. Beyond selecting the initial line, the shipper until 1910 had no rights in the selection of the lines to which the originating roads gave the freight in joint movements. His power to route now goes beyond the selection of the initial carrier in interline movements so as to include the right to select intermediate and terminal lines.

The Mann-Elkins Act of 1910¹ conferred specific routing powers upon shippers. The scope of these powers has been further amplified by the Transportation Act of 1920. The Interstate Commerce Act, Section 15, paragraph 8, as it now stands is the result of the Act to Regulate Commerce of 1887, as it has been amended.² This section now reads:

¹36 Statutes at Large 539.

²41 Statutes at Large 487.

In all cases where at the time of delivery of property to any railroad corporation being a common carrier, for transportation subject to the provisions of this Act to any point of destination, between which and the point of such delivery for shipment, two or more through routes and through rates shall have been established as in this Act provided to which through routes and through rates such carrier is a party, the person, firm, or corporation making such shipment, subject to such reasonable exceptions and regulations as the Interstate Commerce Commission shall from time to time prescribe, shall have the right to designate in writing by which of such through routes such property shall be transported to destination, and it shall thereupon be the duty of the initial carrier to route said property and issue a through bill of lading therefore as so directed, and to transport said property over its own line or lines and deliver the same to a connecting line or lines according to such through route, and it shall be the duty of each of said connecting carriers to receive said property and transport it over the said line or lines and deliver the same to the next succeeding carrier or consignee according to the routing instructions in said bill of lading; Provided, however, that the shipper shall in all instances have the right to determine where competing lines of railroad constitute portions of a through line or route, over which of said competing lines so constituting a portion of said through line or route his freight shall be transported.*

Prior to 1910, the determination of routes after shippers had delivered their freight to a particular carrier rested, in interstate commerce, with the originating railroad company. So long as the property was carried with reasonable despatch over the line of the initial carrier and the connecting lines selected by it, and delivered at the destination provided for in the bill of lading, the contract of transportation was fulfilled. The shipper had no control over the disposition of the freight haul among lines comprising through routes. The extent of the authority of the three parties interested in the transportation of property—the carriers, the shippers, and the Interstate Commerce Com-

* Sec. 15, par. 8.

mission—have now been defined by law. The carriers continued to control routing beyond their lines in some instances but their powers in this respect have been greatly curtailed by the Interstate Commerce Act, as amended, while the powers of the shippers and Interstate Commerce Commission have been greatly extended by legislation since 1910.

Under the amended paragraph of the Interstate Commerce Act quoted above, the shipper may select as among the lines of carriers subject to the Act any of the available through routes covered by through rates. When no through routes are provided for in the tariffs legally applicable to the traffic, the shipper may select any through route that has been established, subject to regulation and suspension, of such routing rights by the Interstate Commerce Commission. If no through rates or through routes have been established, the shipper is entitled to the lowest combination of rates provided for by tariffs that are lawfully in effect at the time the shipment is made. The issuance of a through bill of lading by the initial carrier accepting routing instructions over the lines of several carriers not parties to a tariff publishing a through rate, obligates each carrier to transport the freight over the route shown by the bill of lading. This obligation of the carriers is confirmed by a ruling of the Interstate Commerce Commission. The rate for such movement is the sum of the total rates legally applicable.⁴

The shipper is thus protected against excessive charges for transportation service arising out of carelessness on the part of originating carriers in delivering goods to connecting lines the charges of which are higher than other connecting lines, or from the effect of the deliberate delivery of the goods by the initial line to a favored connection over the line of which higher rates apply.

⁴ I. C. C. Conference Ruling 214(c). See Rulings 190, 316.

The shipper of freight may also designate the terminal carrier to make delivery to the consignee. For reasons best known to the shipper, or because of the location of the plant or warehouse of the consignee near a particular railroad station, or because there is a track connection between the consignee's storehouse and the rails of a certain road, freight may be desired to be delivered by this carrier. The Interstate Commerce Commission has fully recognized this right of the shipper to designate the delivering carrier and has established the liability of the carrier for storage charges and drayage when such instructions have been disregarded. The Commission, in a Conference Ruling, has stated this responsibility in these words:

It is the duty of a carrier to make delivery in accordance with routing directions. When such routing instructions have not been followed and delivery is tendered at another terminal than that designated, it remains the duty of the delivering carrier to make delivery at the terminal designated in routing instructions, either by a switch movement or by carting. In either event the additional expense involved in making such delivery must be borne entirely by the carrier responsible for the misrouting and the reimbursement thereof to the delivering carrier may be made by the carrier at fault without a specific order of the Commission.⁵

If the consignee elects to accept the shipment at the terminal where delivery has been erroneously offered, rather than insist upon delivery at the terminal designated, the shipper or the consignee is entitled to recover damages to the extent of the difference between the expenses of the drayage actually incurred and a reasonable charge therefor, and the expenses which would have been incurred if proper delivery had been effected by the carrier.⁶

When both rail and water rates are available, the shipper must designate which class of service he desires. In the

⁵ I. C. C. Conference Ruling 474(a).

⁶ I. C. C. Conference Ruling 509.

absence of such selection the carrier is not bound to route the freight via rail and water even though the latter route is known by the agent of the originating carrier to be available. This situation has been passed upon by the Commission in informal rulings.⁷ The opinion expressed informally has been amplified in formal cases decided by the Commission.⁸

In the absence of routing instructions by the shipper or owner of the property, it is the duty of the carrier to route the shipment over the cheapest reasonable route known to him of the class selected, that is, via standard all-rail, differential all-rail, or rail-and-water, via which the agent of the carrier at point of origin has rates legally applicable. If both rail-and-water and all-rail rates are available and the shipper does not choose between them, the carrier is not guilty of negligent misrouting in sending shipment all-rail. If a shipment is forwarded via any except the cheapest standard route, the shipper is entitled to a refund of the excess charges. This refund must come from the carrier at fault and is usually refunded through claim channels after the improper charges have been paid at destination by the consignee. The Interstate Commerce Commission has exclusive jurisdiction over claims for damage arising out of the misrouting of freight.⁹

Where a rate and route are both specified in the bill of lading and the rate does not actually apply over the route specified, the agent of the carrier must ascertain from the shipper whether the route or the rate is to be followed. The carrier is responsible for damages resulting from a failure of the agent to follow this course. If the carrier fails, after

⁷ I. C. C. Conference Rulings 190, 214, 284, 316.

⁸ *Lord and Bushnell v. M. C. R. R.* (22 I. C. C. 463); *Meeds Lumber Company v. A. & V. Ry. Co.* (38 I. C. C. 679); *Donahue-Stratton Company v. C. M. & St. P. Ry.* (38 I. C. C. 739); *Keaton v. the St. L. S. W. Ry. Co. of Texas* (39 I. C. C. 221); *Chattanooga Impl. and Mfg. Co. v. L. & N. R. R.* (40 I. C. C. 146).

⁹ I. C. C. Conference Rulings 139, 214, 286(a).

exercising reasonable diligence, to obtain definite instructions, the goods are forwarded by the route specified in the bill of lading. The Interstate Commerce Commission has confirmed this obligation of the carriers' agents.¹⁰

The Carriers' Jurisdiction over Routing

Although a large amount of the carriers' rights to dictate the full route over which freight is to travel beyond the initial lines, in interstate commerce, has been taken from them by Acts of Congress and by decisions and rulings of the Interstate Commerce Commission, they still have some measure of authority in routing. The initial carrier is obligated to transmit routing instructions to its connections. In the event of failure to transmit the orders properly the originating road is liable to the connecting carrier deprived of the haul through the failure. The Transportation Act, 1920, added a new paragraph to Section 15. Paragraph 9 of Section 15 of the Interstate Commerce Act provides that:

Whenever property is diverted or delivered by one carrier to another carrier contrary to routing instructions in the bill of lading, unless such diversion or delivery is in compliance with a lawful order, rule, or regulation of the Commission, such carriers shall, in a suit or action in any court of competent jurisdiction, be jointly and severally liable to the carrier thus deprived of its right to participate in the haul of the property, for the total amount of the rate or charge it would have received had it participated in haul of the property. The carrier to which the property is thus diverted shall not be liable in such suit or action if it can show, the burden of proof being upon it, that before carrying the property it had no notice, by bill of lading, waybill or otherwise, of the routing instruction. In any judgment which may be rendered the plaintiff shall be allowed to recover against the defendant a reasonable attorney's fee to be taxed in the case.¹¹

¹⁰ I. C. C. Conference Rulings 214, 243, 474(c), and cases cited under Conference Ruling 474(c).

¹¹ 41 Statutes at Large 487.

In case of blockade by flood or washout on a connecting line, the originating carrier may notify the shipper of the situation and obtain from him orders as to the route to be used. Local rates to the junction and rates beyond are charged in such instances. If, however, the carrier routes the freight over another route without consulting the shipper, it must bear the burden if the rates are higher than the through rates ordinarily applicable over the route originally selected.¹²

If a carrier's train is detoured over the line of another carrier, or a special train arranged for the movement of the interrupted traffic because of blockade, the tariff rates for such movements, if any are provided, must be applied. Compensation must be agreed upon by the carriers if no tariff regulations cover such contingencies.¹³ This rule does not apply, however, to changes in route due to heavy traffic or ordinary causes. It applies only in cases of actual blockade due to storm, washout, wreck, or casualty of similar nature.¹⁴

Carriers are required to make nonprejudiced distribution of unrouted freight among their connections, so that all connecting lines may participate equally in the distribution of freight traffic which has not been specifically routed by the shippers.¹⁵

The Interstate Commerce Act provides that, "with respect to traffic not routed by the shipper, the Commission may, whenever the public interest and a fair distribution of the traffic require, direct the route which such traffic shall take after it arrives at the terminus of one carrier or

¹² I. C. C. Conference Rulings 83, 146, 147, 213(a). See also *Weyl Zuckerman v. C. M. Ry.* (27 I. C. C. 495) and *Morse Lumber Company v. L. & N. R. R.* (33 I. C. C. 572).

¹³ I. C. C. Conference Ruling 213(b).

¹⁴ See *Woodward and Dickerson v. L. & N. R. R.* (15 I. C. C. 170).

¹⁵ Interstate Commerce Act, as amended by Transportation Act, 1920 (41 Statutes at Large 479), Sec. 3, par. 2.

at a junction point with another carrier and is to be there delivered to another carrier.”¹⁸

The establishment of embargoes during the periods of congestion has at various times interrupted the ability of shippers to route freight. The uniform bill of lading contract provides, in Section 2 A, that “every carrier shall have the right, in case of physical necessity, to forward property by any carrier or route between the point of shipment and the point of destination.”

The rates applying over the route selected by the shipper or the lowest rate over a route of the class selected by the shipper must, however, be protected, if the carrier avails itself of this privilege.

The rights with respect to routing given by the Acts of Congress and the decisions and rulings of the Interstate Commerce Commission do not completely destroy the carriers’ right to prescribe the combinations of lines constituting through routes over which through rates are provided for in tariffs. Specific provision must be made in respect to the routes over which the through rates apply if the carriers party to the tariff wish to reserve the privilege of restricting the route.

The official rules of the Interstate Commerce Commission governing the publication of tariffs provide that the different routes via which tariffs apply may be shown, together with appropriate reference to the application of rates. When a tariff specifies routing, the rates may not be applied via routes not specified. A tariff may show the routing ordinarily and customarily to be used and may provide that, if for any cause shipments are sent via other junction points but over the lines of carriers party to the tariff, the rates will apply.

If a tariff contains no routing directions, the joint rates shown therein are applicable between the points specified

¹⁸ *Ibid.*, Sec. 15, par. 10.

via the lines of any or all carriers that are parties to the tariff; and the shipper must not be required to pay higher charges than those stated in the tariff because the carriers have not agreed on the divisions of the rates via the junction through which the shipment moves. If an agent of the carrier bills or sends a shipment via a route or junction point that is covered by the tariff but via which no division of the rate applies, it is for the carriers to agree between or among themselves upon the division of the rate. The intermediate or delivering carriers may demand from the carrier whose agent so missends the shipment their full local rates for the services they performed. This paragraph should not be construed as conflicting with the routing and misrouting rulings published in Conference Rulings Bulletins.¹⁷

Routing Powers of the Interstate Commerce Commission

The Interstate Commerce Act, as now amended, provides:

Whenever the Commission is of opinion that any carrier by railroad subject to this Act is for any reason unable to transport the traffic offered it so as properly to serve the public, it may upon the same procedure as provided in paragraph 15 of the amended Act, make such just and reasonable directions with respect to the handling, routing and movement of the traffic of such carrier and its distribution over other lines of roads as in the opinion of the Commission will best promote the service in the interest of the public and the commerce of the people, and upon such terms as between the carriers as they may agree upon; or, in the event of their disagreement, as the Commission may after subsequent hearing find to be just and reasonable.¹⁸

During 1922 the Commission availed itself of this authority and issued Service Order No. 22 of July 25, 1922, directing railroads to forward freight to destination over the least congested routes, regardless of routing instruc-

¹⁷ I. C. C. Tariff Circular 18A, Rule 4J.

¹⁸ Sec. 1, par. 16.

tions by shippers or the application of tariffs. The rate applicable over the route selected by the shipper is protected when such rerouting is performed, or if no route has been selected the rate over the cheapest route is assessed. The shipper, therefore, can govern the rate even though, in an emergency, the Commission may order the routing instructions to be disregarded.

The Interstate Commerce Commission is a routing authority not only in that the routing powers of the shipper are subject to whatever exceptions and regulations that it may enforce, but also in that, subject to certain restrictions, it possesses the power to establish through routes either by way of all-rail or rail-water lines. The amended Section 15 of the Act confers upon the Commission the power to establish additional routes even though the carriers themselves have established one or more. The Commission may not, however, establish routes embracing street electric passenger lines, nor may it require a railroad to include in a through route "substantially less than the entire length of its railroad and of any intermediate railroad operated in conjunction and under a common management of control therewith which lies between the termini of such proposed route, unless to do so would make such through route unreasonably long as compared with another practicable through route which could otherwise be established."¹⁹

The Consignee and Routing

The routing of freight is often determined by the wishes of the consignee expressed through the shipper. There is often discussion as to the status of the general rights of the shipper and the consignee in routing freight. Generally, if the goods are sold f. o. b. point of origin or on any other basis in which the consignee pays the freight, the determination of the route is left to the consignee.

¹⁹ Sec. 15, pars. 3, 4.

Orders are transmitted to the shipper directly or through one of the carriers to participate in the haul, instructing the full route to be taken. In other cases, the consignee merely specifies the delivering carrier so as to obtain delivery at the proper freight station or have the freight switched to his private siding. The initial and intermediate carriers are left to the shipper for selection. Standing routing orders are often placed by consignees with their shippers to route all future orders over a given route. In other cases specific routing instructions are placed with each order (Fig. 38).

AMERICAN MANUFACTURING COMPANY NEW YORK, N. Y. TRAFFIC DEPARTMENT	
(Shipper) (Address) (City)	(Date)
GENTLEMEN: Please route our order..... of .....(Date)..... for .....(Commodity)..... in the following way:..... To be packed as follows: Full route Please advise us immediately upon the forwarding of the shipment.	
..... <i>Traffic Manager</i>	

FIG. 38. CUSTOMER'S ROUTING ORDER

If the shippers pay the freight charges they quite generally prescribe the route. Goods that are sold f. o. b. destination or with freight allowed to destination are usually routed by the shippers. The wishes of the consignees

as to terminal delivery or even route, if the rates over the routes requested by the consignee are not higher than the amount of freight allowed or over the route selected by the shipper, are usually respected by shippers in order to hold the good will of their customers. The delivery of the goods is a part and an important part of the services of supplying the customer's needs. As a result, the extent of the consignee's control of the routing of freight frequently extends far beyond the normal amount of control indicated by the terms of sale.

The railroads and steamship lines which compete for traffic solicit routing instructions and blanket routing orders from consignees. These are transmitted either to the shippers or to the commercial offices of their lines or connections at the shipping points so that the representatives of the lines may obtain the goods from the shippers.

CHAPTER X

TRACING FREIGHT MOVEMENTS

The Purpose of Tracing

Tracing overdue shipments is a part of the work of the traffic manager which must be handled carefully and diplomatically. The term "tracer" has its origin in the practice of addressing inquiries to the carriers seeking to discover location of unduly delayed shipments in their possession. The carriers were requested in these communications to investigate the record of movement of the shipments while in their custody and to report to the shipper the records of the delivery of the shipments to the connecting carriers, so that the records of movement might be traced through to the ultimate destinations.

Unnecessary Tracing

The railroads expect to furnish reasonable records of freight intrusted to their custody upon requests, but no reasonable man can expect careful search for shipments which have not had sufficient time to reach destination. Within recent years, many shippers have deluged the carriers of the country with requests to trace shipments which have been in transit only a few days and have not had sufficient time to reach destination. This practice works a double hardship; it has overloaded the tracing machinery of the roads even though, in many instances, additional clerks have been assigned to the work, and more serious still, the efficiency of the record departments of the carriers

have been frequently decreased, because of the volume of the extra and often unnecessary tracing. Some shippers send out promiscuous tracers soon after a shipment is made, in the mistaken belief that in some mysterious way the mere fact of tracing hurries the shipment through. This is, of course, not true. A tracer does nothing to expedite a shipment; its sole function is to establish a record of delivery at movement of the freight in question. The enormous amount of tracing through the country has made it a hardship and sometimes impossible for the carriers to supply prompt and adequate records of movement, and the shippers and consignees are ultimately the sufferers. The practice has acted as a boomerang. Instead of the movement of the traffic being expedited and the necessary record obtained promptly when needed, the sending of tracers resulted often in the congestion of the work of the car and less-than-carload tracing offices so that requests are often not as promptly heeded by the railroads as they would be if only necessary tracing requests were made. Not all the criticism for unnecessary tracing is to be directed against overanxious shippers. Some of the blame rests upon the representatives of the carriers. Freight traffic is often solicited by several of many roads, depending upon the amount of railroad competition. A freight solicitor is eager to secure as much of the shipper's tonnage as possible and he naturally wishes his line to make a good showing as to movement and service on every car he obtains. Often tracers are dispatched soon after the car has been shipped, sometimes by the shipper and sometimes by the solicitor's office, and in some cases cars are traced by the shipper and by the representative of the carrier, working independently of one another. This duplication of work accomplishes little if any result of real importance and should be discouraged whenever possible. Traffic departments should concentrate tracing through one channel.

Legitimate Tracing

When freight is unduly long in reaching destination, tracing becomes necessary. When a legitimate need for a tracer is apparent, the traffic department proceeds to send out inquiries concerning the shipment. Many shipments, traced after unreasonable delay, are never located and the tracing files then become consolidated with claim files and loss claims are filed against the carriers responsible. The shipper is thus protected against having his claims declined because they are not presented within the prescribed periods.

Again, tracing often enables the carriers to associate freight "over without marks" at some intermediate transfer point. The tracers traveling over the route of the shipments frequently catch up with the freight and can be associated with it, and the information necessary to identify the shipment obtained from the tracer.

Another purpose served by tracing is the obtaining of exact information as to the length of time a shipment traveling over a route involving several carriers was in each line's hands. The road taking an unreasonably long time to handle its share of the through movement may be eliminated and a road giving better service substituted in its place in routing future business.

Just when a shipment needs to be traced depends upon the facts surrounding each individual case. The traffic manager must use his discretion as to how soon after shipment has been made tracing should be begun. The terms of sale of the article may affect his decision, for if goods are sold for cash when delivered, the traffic manager of the selling company must know promptly of their arrival so the consignee may be billed. Again, if the traffic manager has suffered because of frequent delays at a particular less-than-carload transfer station, a tracer may eliminate some of the delay, especially in cases where the shipments are

on hand unidentified or neglected for other more pressing business. Frequent tracers seeking to locate delayed shipments over a particular route may result in the investigation by the carriers of the cause of such delays and the ultimate elimination of delays.

Use of Tracers

If tracers are to be used at all, satisfactory results can be got only by the installation of a simple and satisfactory system. After an outbound shipment has been made a memorandum copy of the bill of lading is usually preserved from which the pertinent information may be drawn. From this information a card record of all outward carload shipments is prepared by many traffic departments, showing:

1. Car initial and number
2. Date shipped
3. Contents of car
4. Order number
5. Consignee's name and address
6. Destination
7. Station of origin and originating carrier
8. Route and junctions
9. Date delivered to the carrier
10. Remarks concerning any special conditions or circumstances

The precise nature of the information kept upon the card records depends, of course, upon the needs of the particular industry. Some traffic departments add extra items of information and others do not keep as detailed records. After a reasonable time has elapsed for the car to reach destination, many traffic departments start tracers.

A plan of this sort is used with much success in controlling outbound carload shipments by a number of representative industrial and commercial traffic departments.

Notice is sent to the consignee, containing full shipping information and a notation of the approximate running time from point of origin to destination. The shipper requests the consignee to advise him if the shipment is not received within a reasonable time after the normal delivery date so that tracer can be started.

A form of such a shipping notice is shown below:

AMERICAN MANUFACTURING COMPANY NEW YORK, N. Y. (Date).....	
(Consignee's Name)..... (Consignee's Address).....	
GENTLEMEN: We forwarded today {less carload..... {car initial.....number..... Containing.....your order number..... Routed via..... This shipment should arrive..... If it does not arrive by.....please advise us and we will trace.	
Yours truly, AMERICAN MANUFACTURING COMPANY <i>Traffic Manager</i>	

FIG. 39.

This form is sometimes printed or mimeographed on a post card or on letter-head stationery so as to save stenography in the filling out and so as to standardize the form in order that all the necessary information may be supplied by the clerk whose duty it is to handle this work without stenographic assistance. In a large department forwarding many outbound shipments, the use of a standardized printed or mimeographed form saves much time and work.

It has been found highly desirable when such a system of

tracing is used, to prepare a card or other index of the approximate normal running time from the point of origin to the destinations to which shipments are most frequently made. This information must be revised from time to time as operating conditions change. A card is filed showing the following data:

From Origin.....	
To Destination.....	
Normal running {	time for carloads is.....days. " for less carloads is.....days.
Trace {	carloads, if not delivered in.....days. less carloads if not delivered in.....days.
Running time corrected to.....	(Date):.....

FIG. 40.

In lieu of a card index the same information may be prepared in chart or ledger form, a separate sheet being kept for each point of origin when more than one shipping point is used:

Destination	Origin.....				Corrected to (Date)
	Running Time C/L	L.C.L.	Tracing C/L	L.C.L.	
Akron, Ohio
Alliance, Ohio
Altoona, Pa.
Baltimore, Md.
Chicago, Ill.
Detroit, Mich.
Indianapolis, Ind.

FIG. 41.

Carload Records

Passing records of the movements of all cars at the most important junction points are kept by many railroads. These records are prepared at the various yards and are forwarded to the general freight department of the road and to the more important traffic offices, where they are available for the use of interested shippers. The Pennsylvania Railroad, for example, keeps a record of the passing of cars through the following yards on its system:

Alexandria (Potomac Yard), Va.	Harrisburg, Pa.
Allegheny (Island Avenue), Pa.	Harsimus Cove (Jersey City), N. J.
Buffalo, N. Y.	Indianapolis, Ind.
Cape Charles, Va.	Logansport, Ind.
Chicago, Ill.	Newberry Junction (Williams- port), Pa.
Cincinnati, Ohio	Oil City, Pa.
Columbus, Ohio	Peoria, Ill.
Conway, Pa.	Pitcairn, Pa.
Crestline, Ohio	Richmond, Ind.
Dennison, Ohio	Saint Louis, Mo.
Edgemoor, Del.	Scully, Pa.
Enola Yard (Harrisburg), Pa.	Toledo, Ohio
Erie, Pa.	Wilkes-Barre (Buttonwood), Pa.
Fort Wayne, Ind.	Williamsport (Newberry Junc- tion), Pa.
Grand Rapids, Mich.	West Morrisville, Pa.
Greenville Piers (Jersey City), N. J.	
Hagerstown, Md.	

These reports are on file usually within twenty-four hours of the time the movement is made, or as soon after as practicable. The information contained in these reports makes available a centralized source of information by which the movements of carload shipments can be readily traced. Other roads maintain similar systems of records which are on file in the general freight departments and various freight offices. These reports usually show the

train number, engine number, and the train and engine and time of departure, or if delivered to a connecting line the time of such delivery. The entire progress of a car can be traced from yard to yard by these reports. By consulting these records at the nearest freight office of the carriers the shipper can save time and money and the carriers may be relieved of the burden of supplying tracing information by correspondence.

Forms of Tracers

Authorities are divided upon the subject of the most effective kind of tracing communication. Many prefer to use a printed or mimeographed form, either letter or post card, requesting the carriers to trace. A typical form is shown in Figure 42.

AMERICAN MANUFACTURING COMPANY NEW YORK, N. Y.		
	(Date)	
.....Agent		
.....Carrier		
.....Address		
Please trace the following shipment, hurrying it forward to destination and advising us of progress of your investigation.		
Shipper		
Consignee		
Destination		
Description of shipment.....	Weight.....	
From	Waybill number	Rate
Car initial and number		
AMERICAN MANUFACTURING COMPANY <i>Traffic Manager</i>		

FIG. 42.

This same type of form may be used for tracing both carload and less-than-carload freight, the car number being inserted in case of carload shipments and the waybill reference, obtained from the local agent of the originating carrier, in case of less-than-carloads. The use of a post-card form of this sort saves time and postage, but has a disadvantage in that it is difficult to make a carbon-copy record of the tracer. This difficulty is often avoided by using a form of the same character, on letter paper, the original being filled out and sent to the carrier and the duplicate retained for filing. In some instances a notation is made advising the carrier that the tracer is to be considered as a preliminary notice of claim, so as to comply with the requirement as to the period within which claim must be filed.

Some traffic managers prefer not to use any form at all but to write letters on each tracing case, on the ground that an individual letter is more apt to receive attention than a form letter. This objection is even more valid in the case of expediting freight, which will be discussed later.

Less-than-Carload Tracing

Less-than-carload freight, excepting shipments of such size that transfer from car to car is inadvisable, and shipments which are loaded in solid merchandise cars from large centers to large centers, are transferred en route at transfer points. This practice makes the transfer of L. C. L. freight difficult in the extreme, especially in cases where actual reloading records are not kept at the transfer points. In case only probable loading records are kept, only the "short" or damaged shipments are recorded, the others being assumed to have been loaded in the car forwarded to the next logical transfer point on the same day. Tracing L. C. L. freight is often necessary and much the same pro-

cedure is used as in case of tracers for carloads. Waybill references, however, must be obtained from the agents of originating carriers at points of origin as well as the dates of shipment, the numbers of cars into which shipments are loaded, and transfers to which cars are carded to break bulk. With this information the cars can be traced to the transfer points and the probable or actual records of re-forwarding obtained. The work of tracing inbound shipments is virtually the same as in tracing outbound. Care must be exercised in such tracing to obtain reliable forwarding records from the originating carriers. These records are more difficult to obtain from far-distant points than when the agents of the carriers forwarding the freight are in the same town as the shippers.

Less-than-carload shipments are so difficult to trace that the proverbial needle in the haystack is as easy to locate as many L. C. L. shipments. In order that intelligent tracing may be done, it is necessary that the following information be furnished the carrier:

(a) If request is made of the agent of the carrier at point of origin to supply forwarding information, the letter requesting the information should show:

1. Shipper's name and address
2. Date of shipment as shown by bill of lading
3. Consignee's name and address
4. Commodity
5. Number and kind of packages
6. Weight
7. Marks

A request should be made for waybill reference, car-loading record and carding point for transfer.

Equipped with this data, the originating carrier should be able to inform the requester:

1. The waybill reference number and date
2. The initials and number of the car into which the shipment was loaded
3. The point to which the car was carded to break bulk

(b) Subsequent tracers to transfer points should show all of this information so that a complete record is available for use of the tracing clerks of the carriers at transfer points. If incomplete information is furnished, the missing data must be sought by these clerks through correspondence with the person requesting the information, or with other railroad offices. The purpose of the tracer is often defeated if this must be done.

Tracing by Carriers

When the railway agent receives a request to trace a less-than-carload shipment, the outbound billing record is looked up, covering the shipments made from the station on the day the shipment in question was made. The shipment on which a tracer is requested is located and the waybill number is noted. A railroad tracer form is filled out with the appropriate information, and transmitted to the agent on whom the billing was made; copies are sent to agents of the carriers at intermediate stations where transfer is made, for their record. The station agent at ultimate destination is asked to show the record of delivery to consignee or to connecting carrier if it is handled by several carriers. If such record of delivery cannot be shown, the Freight Claim Department is asked to investigate so as to learn whether the freight sought is "on hand" or "over without marks" at any station along the line. Many such cases of shortage result from loading freight in wrong cars or by the loss of tags which identify the shipment. The carriers' and shippers' organizations are attempting to reduce the amount of loss through the loss of tags or the

obliteration of marks, by recommending that a tag be placed inside the packages which will serve to identify the shipments if outside tags are lost or mutilated.

Carload freight is usually traced through the general freight department of the carriers or through their traffic representatives. Railway telephone and telegraph communications are used to trace the progress of the car through the yards along the line of the roads. Shippers located at points at a distance from the railroad offices usually trace by letters or wires or telephone calls to the traffic or operation officials in whose district the cars are sought.

Tracing Records

While a car or less-than-carload shipment is being actively traced, a card record or other record is often kept by industrial and commercial traffic departments, on which is shown a complete record of the movement of the car by train and engine number, time and date from yard to yard. Cards similar to the form shown in Figure 43 are usually kept in index boxes, each card arranged under the last two digits of the car number. Thus car P. R. R. 312652 is indexed in compartment 52. Compartments are provided from 00 to 99. Cars requiring urgent tracing are checked, sometimes with red marks or other device, to bring them prominently to the attention of the trace clerks. As each bit of movement information is received a record of it is made on the card and the tracer continued to the next point where a forwarding record can be obtained. Thus a complete record of the movement of such cars can be had at any time and their locations known as frequently as is necessary. As cars are delivered at destination the card or other record is taken from the active file and placed in a "dead" file for permanent record.

A similar card or other index is often kept of L. C. L. freight which is actively traced. In the case of less-than-

CARLOAD TRACE CARD	
Car Initial and Number.....	
Contents	Order No.
From	
Date Shipped	
Originating Road	
Through Route	
Destination	
<i>Movement Record</i>	

FIG. 43.

carload freight the waybill reference numbers are noted as well as the original car numbers. The movement record of such shipments shows the cars into which the shipments were reloaded, either "actually" or "probably," at each junction or "break bulk" point.

Filing Tracers

Various systems are used in filing tracing information. One of the most favored systems is the filing of "dead" card tracing forms under the last two digits of the car number, in case of carload shipments and under the shipper's or consignee's name or commodity in case of less than carloads. A notation is made on the cards of the file numbers covering the correspondence on the tracing. The correspondence file is variously kept. Some traffic departments keep records of tracers under a numerical file number, each shipment traced being assigned a consecutive number. An index book in which each shipment is listed under the consignee's or shipper's name is used as a guide.

As tracers become old and the time limit beyond which claims may not be filed draws near, efforts to trace the shipments are abandoned and the tracer file is consolidated with the claim file and notation to such effect made on the

tracer index register. In this way every tracer results in either delivery or a claim and no claims are outlawed by lapse of time.

Organization for Tracing

As a rule only the large industrial and commercial concerns have sufficient tracing to do to justify the organization of a tracing subdepartment or bureau. There are instances of such bureaus which devote their entire attention to tracing the movement of inbound and outbound carload and L. C. L. traffic. Many other departments have one man who specializes in this work, reporting in some instances directly to the manager or assistant manager of the department. In still other cases, tracing is handled by clerks of the claim subdepartment or bureau or by men who also devote a part of their time to tracing and a part to expediting. There is such a close connection of tracing with claim work and with expediting that it appears to be chiefly the adaption of the organization to suit the peculiar needs of each industrial and commercial traffic department that determines the bureau to which the man or men engaged in tracing are to be attached.

CHAPTER XI

EXPEDITING FREIGHT

The Purpose of Expediting

A distinction may be drawn between expediting the movement of freight and the tracing of shipments. To expedite is to hurry forward to destination, while to trace is to establish the location of a shipment which has been unduly long in transit. Tracing seeks to put the carrier on notice that the delay in delivery has already inconvenienced the consignee and that prompt delivery is required, while expediting seeks to avoid such inconvenience.

Effect of the World War upon Expediting

After 1914, a great increase in tonnage, partly accounted for by the War in Europe, was thrust upon American carriers. The congestions which threatened in 1914 and 1915 became realities during 1916 and the early months of 1917, by the large amounts of tonnage from war orders placed in this country by the belligerents. With the entrance of the United States into the War in 1917, the volume of railroad tonnage was even further increased. In addition to the normal volume of commercial traffic, war munition plants and other essential war industries threatened to clog the arteries of transportation. The rail lines of the United States were not entirely prepared to handle this enormous tonnage. Locomotives and cars had been in such continuous use that they could not be spared from service to be properly shopped. Only the repairs that were absolutely essential to keep the equipment in service were made in

many instances. The railroad organizations were overloaded with work and new men were difficult to secure and hard to retain in part because of the rise in wages in industry and the depletion of the organizations by the absorption of men into the military establishment. In short, the railroad facilities of this country were forced to bear a traffic load far beyond that which they were designed to bear. The result was, inevitably, a congestion of freight which threatened to stagnate the industrial and military organizations in the United States. There was little that could have been done to avert this situation. The wonder is that the railroads were able to do as much as they did. They put forth superhuman efforts to maintain the traditional standards of American railway-operating efficiency and succeeded in averting complete stagnation but could not prevent terrible congestions in yards and terminals.

A large portion of the rail-borne traffic, especially along the northeastern seaboard, was urgently needed freight for the munitions plants, ship yards, cantonments, and essential industries. This freight was needed in connection with war orders and military operations which were being carried forward at a headlong gait. The War had come upon the United States so quickly that little time was given in which to lay out a systematic program of preparation along industrial lines. All the industrial establishments, engaged in the manufacture of materials needed by the armies and navies of the United States, were competing with each other for raw materials and for the right of way for their supplies and products over the already overburdened rails of the carriers.

Shipments of food stuffs and other materials essential to life for the civilian population had to fight for passage over the arteries of transportation. It was obviously impossible for the railroads to move everything. Every industry, therefore, sought to secure as good service for their

particular products or supplies as they could get, and the government of the United States, first through priority orders and later through the orders of the U. S. Railroad Administration, sought to arrange for preference movements for the most urgently needed shipments. Even though preference was ordered for essential shipments, the congestion was so great and the needed tonnage so heavy that cars which were urgently required were expedited by letters or wires addressed to railroad officials, requesting rapid movement, or else the movements of important shipments were followed from yard to yard by traveling expeditors.

This war-time experience in bringing cars through congestions developed a new technique of expediting which was of great value to commerce and industry during the after-War periods of congestion and which is used now to rush forward urgently needed shipments. The long periods of under-maintenance of locomotives and cars and the impaired efficiency, due largely to strikes and the change from government to private management, took their toll of the carriers. During the years following the War, congestion and embargoes were common and shipments needed by industrial establishments have been carefully watched and expedited forward to destination.

Abuse of Expediting

Representatives of the carriers frequently complain that traffic departments sometimes overdo the rushing forward of cars. Some traffic managers have become unreasonable in their requests for expeditious service and demand record-breaking runs on every car shipped. Railroad officials receive daily letters, telegrams, and calls from traffic managers urging haste on shipments, some of which are not urgently needed. Such demands for quick movements, made indiscriminately on every car, defeat the real object

of expediting. All cars cannot be rushed. Rush service should be reserved for the comparatively small number of cars for which there is really urgent need. The rest of the tonnage should be given only such attention as is needed to keep it in the normal flow of traffic. A specific instance will show just how indiscriminate expediting defeats itself. An industrial enterprise in the East was engaged in handling the movement of a large tonnage of steel, some of which was urgently needed for early erection and the rest of only passing importance. The member of the traffic department in charge of the expediting bureau flooded operating and traffic officials along the lines of movement with telegrams urging preferential movement. In each wire he told of the extreme urgency of the need for the particular car referred to in that wire and urged and demanded that the car be rushed with breakneck speed toward destination. The first few wires received attention and preference movements were arranged. After many wires had been received each demanding preferred movement on some car, alleged to be needed to avert an acute shortage, little or no attention was paid to any particular car except to see that normal running schedule was maintained. As a result of the overly zealous but misguided expediting efforts expended on relatively unimportant cars, the shipments that were really urgently needed were given only perfunctory attention and the erection schedule was badly delayed because of waiting for important shipments while the consignee's siding was clogged with cars, the contents of which were not badly needed. Overexpediting is sometimes worse than too little.

As in the case of promiscuous tracing, all the responsibility for overexpediting does not rest with unduly zealous industrial and commercial traffic departments. Competitive freight traffic is often solicited strenuously by the representatives of several lines. Many of these solicitors re-

quest the shippers to advise them when the shipments go forward so that the car may be reported as business secured and the solicitor given credit for obtaining it. Each railroad commercial office then attempts to arrange for especially good movement for the car over its line and connections. As a result a half-dozen offices may be urging the car forward and none of them accomplishing more than irritating the operating staff of the road handling the car. It may be put down as an axiom that to try to expedite everything results in expediting nothing.

Discriminate Use of Expediting Requests

It is undoubtedly true that cars which are called to the carrier's attention as being urgently needed receive, as a rule, better movement than ordinary cars for which no special movement is requested, provided the railroads believe the request to be a reasonable one, made in good faith. A commercial or an industrial traffic manager who establishes a reputation for reasonableness in this respect, usually has his requests for expediting heeded. The indiscriminate "rusher" soon becomes unfavorably known by railroad officials and his "urgers" are apt to be regarded as of doubtful validity.

The relative importance of the shipments of freight in transit are carefully analyzed by painstaking traffic managers, and shipments really needed are called to the attention of responsible traffic or operating officials of the railroads and prompt movement urged. If possible, shipments which are to require preferential movements are brought to the attention of the proper representatives of the carriers prior to the date shipments are made, so that orders to place and keep the cars on preference trains may be issued by railroad operating officials to employees along the line the cars are to travel. It is easier, from an operating standpoint, to keep cars moving at a fast pace than to "dig

a car out'' from among other shipments of slow freight, in order to place it on a scheduled train for faster movement.

Expediting Records

The practices in many well run industrial and commercial traffic departments in connection with car records have been referred to in a previous chapter. Car record cards or ledger sheets are kept for all cars in transit. Cars for which preference movements are required are usually distinguished by a symbol or mark so that they may be kept prominently before the attention of the expeditor. The file number and the movement record are recorded on the car card so that the status and location of the car may be noted without the necessity of consulting the correspondence files. As soon as the information that a shipment has been forwarded is received and the essential forwarding information obtained, the traffic or operating official of the carrier at the next junction is advised by wire of the forwarding and the prompt movement of the car through the next junction requested. A further request is usually made, that the official addressed furnish by wire the information concerning the forwarding of car to the next junction point. It is important that the train number, if on a preference train, engine number, and exact time the train leaves the yard be obtained so that the train containing the car may be traced in case it is "stored" before reaching the next yard. This process is repeated until the car reaches a territory where its movement may be attended to by telephone calls. The same sort of information is supplied the representatives of the carriers, and rush movement and new record of forwarding are obtained. These records are entered as they are received on the car record cards, or ledger sheets, and kept posted until the car is received in the yard. The card then becomes the basis for a demurrage

record and is usually turned over to the bureau handling demurrage.

Prior Arrangement for Movement

The safest and most effective method of expediting starts before the cars are shipped. When rush orders of goods are placed, the approximate dates of forwarding are learned from the manufacturing department. Large industries usually work on schedules. Shop orders are issued and the date on which orders will be finished can be predicted within a variation of a few days. The traffic departments seeking to arrange for the expediting of the cars usually inform the railroad officials along the line of the importance of the shipments and arrange to have the cars given preferred attention. Many railroads have systems of scheduled freight movements. These preference trains are made up and sent through from one primary yard to another and through cars are not reclassified out of the train at intermediate yards except for "bad order" or other unavoidable cause. Preference or symbol trains run on more or less definite schedules and take precedence over slow freight trains, and consequently make much better time between yards and through yards. When the cars in which the urgent shipments are to be loaded are ordered for placement, the cars are carefully looked over by car inspectors of the carriers and of the shippers, so that the probability of the cars being shopped for repairs en route is reduced to a minimum. The cars are loaded carefully to prevent shifting of the loads, and the local agents of the railroad and local yard officials are informed of the forwarding of the cars so that they can take proper steps to have them promptly made up into the preference trains.

When the train containing the rush cars leaves the local yards, the train masters and yardmasters are informed of the importance of the cars by the division superintendents

or other railroad operating officials, so that they may be held in the through train. Usually, important cars are placed well up in the trains, near the locomotive, to avoid the danger of the cars being dropped from an overloaded train at some way yard. Barring accident or engine trouble the cars should make good time to destination. Delays, however, sometimes arise out of motive-power shortages, or blockades, or shopping for car repairs. Cars are dropped at yards along the way because of inability to handle all the cars on the train. It is a difficult matter to have the car picked up by another through train and rushed forward to destination. Telegrams and personal visits then become necessary to persuade the operating officials to depart from their routine and make special efforts to pick up the car.

Cars sometimes must be cut out of a train for repairs. If the fault is a slight one it may be repaired "under load." If the repair is of an extensive nature, the contents of the cars are transferred to other cars. This often causes considerable delay. The traffic departments handling the expediting must prevail upon the railroads to repair the car before its normal turn, if it is to be repaired under load, or must arrange to have the contents transferred if the repairs to be made are of a major nature. Again the traffic manager must convince operating men of the urgency of the car by wire or by visit of a representative. Other urgent cars are bidding for attention and each traffic manager wishing preferred attention for his rush shipment must "sell" his case to the railroad officials responsible for the performance of the service required.

Forms of Expediting Communications

Stereotyped form letters and telegrams are usually avoided in expediting. Each case has its own peculiar needs and reason for quick service and these facts must be

explained to the railroad officials asked to expedite the shipment. Letters or other communications must contain all the information necessary for the carriers to identify the shipment and should state truthfully and concisely why the car is needed so urgently. The need should not be magnified, for exaggeration tends to become a habit and expedited movement is really a question of salesmanship; the traffic manager must "sell," to borrow a term from the dictionary of salesmanship, the importance of the car to the railroad men to persuade them to give it extraordinary attention. All salesmanship of the right kind rests on truthfulness and sincerity and this type is no exception. Letters should be as brief as possible and telegrams still briefer, but both types of communication should show:

1. Car initial and number
2. Point of origin
3. Shipper
4. Consignee
5. Destination
6. Reason for urgent need
7. Exact forwarding information, including:
 - (a) Train number
 - (b) Engine number
 - (c) Time forwarded
 - (d) Dates
 - (e) Yard forwarded from
 - (f) Yard destined to
8. A request for expeditious handling
9. A request for complete new forwarding data

Telegrams to railway men at points along the line need not contain information as to shipper and originating point, but should be sure to give exact information as to forwarding, so the car can be readily identified and traced back if it has been left off a train. Experience and common sense must be drawn upon in determining how the case is to be

presented as no hard and fast system can possibly fit all cases.

With Whom Expediting Requests Should Be Placed

The railroad business is still one in which competition exists and traffic departments of railroads the country over are concerned in obtaining and retaining freight tonnage. Soliciting representatives of the carriers and the division and general freight agents are concerned with the development of good will of shippers and consignees in their respective territories. The traffic departments of the carriers are usually requested to arrange for urgent movements of freight, and requests for forwarding information are often directed to the freight department representative in whose jurisdiction the car is located at the time the request is made. Some rail lines discourage correspondence about car movements between operating officials and shippers and consignees. The individual officers who give the best attention to such requests are learned only by experience. A list of officials in different sections of the country representing various roads can be referred to in the *Official Railway Guide*, and this publication may be consulted to obtain the correct name, title, and address of each official to whom correspondence is to be addressed.

Expediting Shipments Traveling over Other than All-Rail Route

The movement of traffic over the lines of water, motor, and express carriers may be arranged for in much the same manner as over all-rail routes. In the case of carriers by water, the expediting efforts of industrial and commercial traffic departments are directed chiefly to arranging for the accommodation of the urgently needed freight aboard a particular steamship. The services of the traffic and operating officials of the steamship lines are enlisted to

get the freight from the piers of connecting lines or from the teamsters or forwarders attending to the movement of the goods through the ports, and arrangements are made to have the goods placed in an accessible part of the hold of the steamer so that it may be "turned out" among the first freight at the port of destination. Many coastwise, inter-coastal, and overseas steamship companies have a "Red Letter" or other special freight service which is designed to take care of special shipments.

In the case of highway and express transportation companies, little can be said regarding expediting, for both sorts of carriers specialize in rush traffic. Once the goods are brought to the outbound stations and the need for immediate and rapid movement is impressed upon the forwarding agents, they should move on the regular fast schedule of these carriers, barring congestion or embargoes on the lines of express carriers and impossible roads or accidents in the case of the motor lines.

Special movements are frequently arranged for and the movements followed to destination over the lines of the express companies by industrial and commercial traffic departments, which use the same methods of procedure as have been discussed above in connection with expediting rail shipments.

Commercial and Industrial Expediting Organizations

Expediting and tracing are so closely allied that many shippers' traffic departments are organized so as to have both functions performed in one bureau. In other instances, tracing is attended to by members of the claim bureau organization and expediting is attended to by an assistant or an assistant to the traffic manager.

Many industrial traffic departments have large bureau organizations with a number of employees specializing in this branch of work alone. Industries which work on close

time and production schedules, building and construction contracting companies and others which need materials to maintain erection and construction schedules, often have large forces of office and traveling expeditors. Organizations of this sort are usually in charge of an experienced chief or senior expeditor or an assistant traffic manager. Subordinate to him are a number of office expeditors attending to the office work of the organization, local expeditors who are responsible for moving shipments in the vicinity,

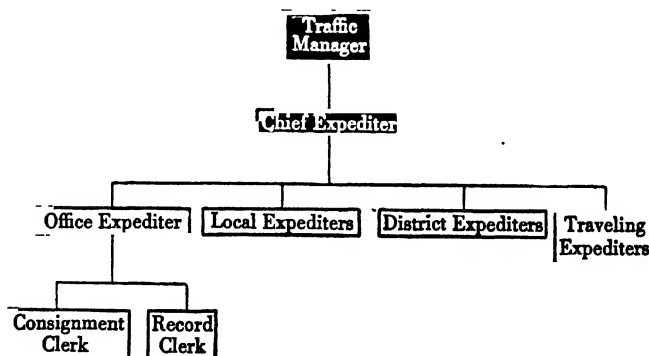


FIG. 44. ORGANIZATION OF A TYPICAL EXPEDITING BUREAU

a number of traveling men who follow the movements of urgently needed shipments through from origin to destination, and district representatives who are sometimes stationed close to important junctions. These field men report the progress of cars to the head office and see to it that urgently needed cars are handled promptly. A typical expediting bureau of a large construction company doing business in a number of sections of the country is shown in Figure 44.

In some instances the district local and traveling expeditors attend to the work of rushing orders through the

plants of companies furnishing supplies and of having shipments made promptly as well as expediting the movement of shipments over the lines of the carriers. This work is usually undertaken in coöperation with the purchasing department.

CHAPTER XII

FREIGHT CLAIMS

Rail Carriers' Liability

The liability of carriers by rail for the safe transportation of goods in their possession is established by the common law, by statute law, by the terms of classifications and tariffs applicable to shipments, and by the provisions of the uniform bill of lading contract governing shipments. A complete analysis of all phases of carriers' legal liability is impracticable except in purely legal treatises upon the subject, but the essential features must be clearly understood by the managers and claim clerks of industrial traffic departments to protect their companies from financial loss. The limits upon the full liability of rail, water, express, and motor carriers must be understood so that insurance may be placed to indemnify the owners of goods in transit for losses suffered for which the carriers are not fully liable.

Carriers by rail are liable, when acting as carriers, for all the usual forms of loss, damage, or delay unless caused by any of the following causes:

1. An act of God.
2. An act of the public enemy.
3. The authority of the law.
4. An act or default of the shipper or owner.
5. Natural shrinkage.
6. Fire occurring after the expiration of the free time allowed by tariffs lawfully on file, after notice of arrival of property at destination has been sent or given, and after placement of the property or tender of delivery to the party entitled to receive it has been made.

7. Quarantine.
8. Act or failure of connecting lines (initial carrier acts in capacity of agent only).
9. Failure to transport property by any particular train or in time for any particular market (reasonable dispatch only required).
10. Deviation or unavoidable delay incurred in procuring compression of cotton or cotton linters.
11. Stopping or holding goods in transit at request of shippers, owners, or parties entitled to make such requests.
12. Defect or vice of property.
13. Country damage to cotton.
14. Riot.
15. Strike.
16. Property being delivered to or taken from nonagency stations before it is loaded to cars or after it has been unloaded.
17. The shipping of explosives or other dangerous goods without written disclosure of nature (shipper or owner liable for any damage caused).
18. Delays awaiting further conveyance after proper tender of delivery to next connecting line.
19. Mistake or inaccuracy of information furnished by carriers regarding quarantine laws.
20. The sending of unclaimed freight to public warehouses for storage.

Forty-eight hours after an arrival notice has been sent or given to the consignee, or as otherwise provided for in tariffs governing shipments, the railroads cease to be liable as carriers for all losses or damages, except as limited by the exceptions contained in the uniform bill of lading contract, shown above, or by statutes, classifications, or tariffs, and become liable only as warehousemen and responsible for only such damages or losses as are caused by lack of reasonable care on their part.

Statute limitations to full common-law carriers' liability in interstate commerce have been altered several times since the original Act to Regulate Commerce of 1887. The extent

or amount to which carriers by rail are liable is governed by paragraphs 11 and 12 of Section 20 of the Act to Regulate Commerce, as amended.¹ Carriers subject to the Act are required to issue a receipt or bill of lading and are responsible

to the lawful holder thereof for any loss, damage or injury to such property caused by it or by any common carrier, railroad or transportation company to which such property may be delivered or over whose line or lines such property may pass . . . when transported on a through bill of lading and no contract, receipt, rule, regulation or other limitation of any character whatsoever, shall exempt such common carrier . . . from the liability hereby imposed, . . . and such common carrier shall be liable to the lawful holder of said receipt or bill of lading or to any party entitled to recover thereon, . . . for the full actual loss, damage, or injury to property, . . . notwithstanding any limitation of liability or limitation of the amount of recovery or representation or agreement as to value in any such receipt or bill of lading, or in any contract, rule, regulation, or in any tariff filed with the Interstate Commerce Commission; and any such limitation, without respect to the manner or form in which it is sought to be made, is hereby declared to be unlawful and void.

Exceptions are made, however, to this full liability in case of damage or loss to property in the custody of water carriers, or baggage carried on passenger trains or boats, or

to property, except ordinary live stock, received for transportation concerning which the carrier shall have been or shall hereafter be expressly authorized or required by order of the Interstate Commerce Commission to establish and maintain rates dependent upon the value declared in writing by the shipper or agreed upon in writing as the released value of the property, in which case such declaration or agreement shall have no other effect than to limit liability and recovery to an amount not exceeding the value so declared or released.

¹ 38 Statutes at Large 1197; 41 Statutes at Large 494; 34 Statutes at Large 584; and 39 Statutes at Large 441.

Shipments may thus be made in interstate commerce, with the exceptions indicated, subject to limited liability on the part of the carriers transporting the property at rates contingent upon the value of the articles. Household goods, glassware, furniture, and a number of other commodities are accorded rates dependent upon released valuations and may be transported at limited liability by the carriers by virtue of the provisions of this amendment to the Cummins Amendment to the Act to Regulate Commerce. This amendment applies to all carriers subject to the Act to Regulate Commerce so that express companies as well as rail lines, in interstate commerce, are governed by its provisions. A number of states, however, prohibit carriers from limiting their liability in connection with intrastate business.

Liability of Water Carriers

Except for shipments which move at insured rates from points within the United States to other points within the country or adjacent foreign countries on through bills of lading over rail-and-water routes, the liability of water carriers for loss or damage to goods is quite different from that of railroads. The limit of liability for water carriers is governed by the Harter Act of February 13, 1893,² which accords carriers by water the protection of limited liability. They are not responsible for loss or damage resulting from the following causes:

1. Fire on board vessel
2. Bursting of boilers
3. Breakage of shafts unless caused by design or negligence of the carriers

The only losses or damages for which such carriers are responsible include those arising out of:

² Revised Statutes of the United States, Secs. 4281-4286, incl.

1. Failure of owners of vessels to exercise due diligence to make the vessels in all respects seaworthy and capable of performing their intended voyages
2. Failure to exercise due diligence in properly manning, equipping, provisioning, and outfitting their vessels
3. Neglect, fault, or failure in proper loading stowage, custody, care or proper delivery

Ocean bills of lading, while not uniform, agree in this one important respect—they provide limited liability for loss or damage to cargo covered by such bill of lading contracts. The water carriers are not insurers of the goods in their possession and the risks of water transportation must be covered by the owners of the goods by means of marine insurance. The goods, freight charges which have been prepaid, and profits may be and usually are protected by marine insurance policies, issued by insurance companies in favor of the owners of the goods. Shippers look to the insurance companies which have issued marine insurance policies and to whose agents the premiums have been paid, to indemnify them for loss or damage arising out of ocean transportation. Claims are prepared in the manner prescribed by the insurance companies and are presented to the insurers and not to the water transportation companies. Forms to be used in proving losses are not uniform among insurance companies, each concern supplying the forms and other supporting documentary evidences of loss to claimants upon request.

Liability of Motor-Transportation Companies

In the absence of action by Congress in the regulation of motor carriers engaged in interstate commerce, their regulation has been undertaken exclusively by the various state governments. Motor trucks are not recognized as common carriers subject to the Act to Regulate Commerce

by the Interstate Commerce Commission and consequently the regulations of carriers' liability set forth in Section 20 of the Act to Regulate Commerce do not apply.

Motor trucks which are held out by their owners and operators as carriers of goods for all who require their services are common carriers within the common-law meaning of that term and as such are responsible for the goods intrusted to their care for transportation. The states in many cases, through the public service and other regulatory commissions, have undertaken the regulation of motor truck carriers so as to establish their liability for loss of and damage to goods in intrastate commerce and the police power of the state and Federal governments has been invoked to protect the users of such transportation facilities from loss from the failure of the carriers to transport their goods properly.

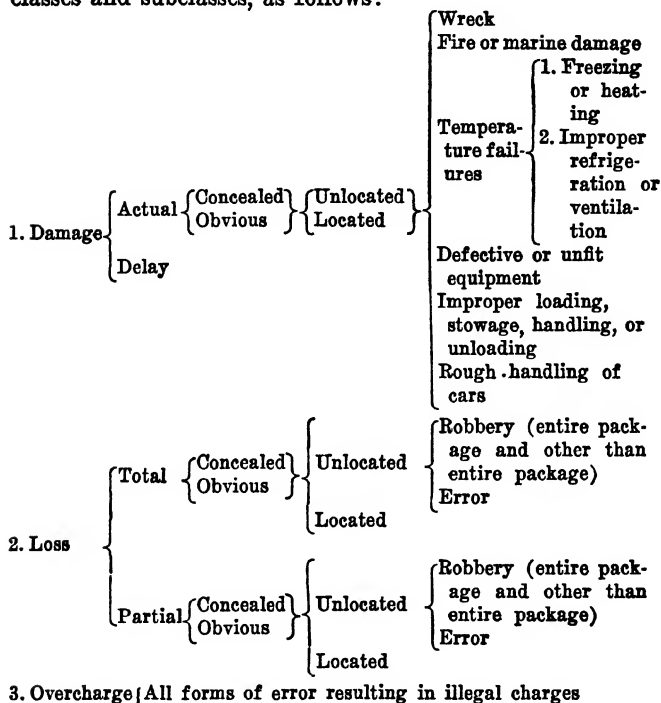
Classes of Claims

Claims against carriers may be divided into three general classes: (1) damage, (2) loss, and (3) overcharge. Further subdivisions may be made so as to differentiate between actual damage to the goods and damage resulting from unreasonable delay in transporting the goods: "located damage," damage resulting from a definitely known cause as contrasted to "unlocated" or undetermined damage; and "concealed" damage which is not discovered until after the goods have been delivered to the consignee and a clear record of receipt obtained as contrasted to damage which is apparent when delivery is made.

Similar subdivision may be made of losses as between total and partial loss of the shipment: "unlocated" and "located" loss, "concealed" and "apparent" loss.

Overcharges similarly arise out of a number of causes which were enumerated in Chapter VII in the discussion of rates and freight bill auditing.

An outline classification of claims indicates the major classes and subclasses, as follows:



The Freight Claim Division of the American Railway Association publishes a classified summary by principal causes of expenditures made by railways in settlement of loss and damage claims as shown in the table on page 256.

A further analysis of loss and damage claims paid by American and Canadian rail carriers, members of the Freight Claim Division of the American Railway Association, is interesting in this connection. A classified summary, by principal causes of freight loss and damage expenditures of 209 carriers, representing in mileage 95 per

Causes of Expenditure	Per Cent of All Loss and Damage Claims			
	1921	1922	1923	1924
A. Unlocated loss (entire package).....	13.6	10.5	8.1	7.0
B. Unlocated loss (other than entire package)	7.8	6.8	5.8	5.4
C. Damage (unlocated).....	14.7	14.4	15.6	17.1
D. Damage (rough handling of cars)...	14.6	17.2	17.9	19.9
E. Damage (improper handling, loading, unloading, and stowing).....	2.2	2.2	1.9	1.9
F. Defective or unfit equipment.....	10.3	10.1	11.2	8.9
G. Temperature failures (improper refrigeration or ventilation).....	2.7	3.2	3.0	2.7
H. Temperature failures (freezing or heater failures)	1.1	1.8	1.8	2.0
I. Delay	10.8	10.4	13.5	15.8
J. Robbery (entire package).....	4.6	4.8	3.0	2.6
K. Robbery (other than entire package)...	5.7	5.2	3.3	2.2
L. Concealed loss.....	1.3	1.3	1.1	1.0
M. Concealed damage.....	2.3	3.1	3.6	4.4
N. Wreck	5.0	5.4	7.1	6.4
O. Fire or marine loss or damage.....	.9	1.0	.8	.5
P. Error of employee.....	2.4	2.7	2.3	2.2
ALL LOSS AND DAMAGE CLAIMS	100.0	100.0	100.0	100.0

cent of the American and 60 per cent of the Canadian members of the American Railway Association, showed that these carriers had paid in the year ending December 31, 1924, loss and damage claims amounting to \$49,540,377, in 1923, and \$48,262,543 in 1924.

This amount was divided as follows:

CAUSES

Loss, including:

- A. Unlocated loss (entire package)
- B. Unlocated loss (other than entire package)
- F. Defective or unfit equipment
- J. Robbery (entire package)
- K. Robbery (other than entire package)
- L. Concealed loss
- P. Error of employee

\$12,166,818.00 or 25.2 per cent of all freight loss and damage claims

This amount was divided, 54.9 per cent carload shipments and 45.1 per cent less-than-carload.

Damage, including:

C. Unlocated damage	} \$28,488,128 or 59 per cent of all freight loss and damage claims
D. Rough handling of cars	
E. Improper handling, loading, unloading, or stowing	
F. Defective or unfit equipment	
G. Improper refrigeration	
H. Freezing or heater failure	
M. Concealed damage	
N. Wreck	}
O. Fire or marine loss or damage	

This amount was divided, 72.1 per cent carload and 27.9 per cent less-than-carload.

Delay

I. Delay	} \$7,607,597 or 15.8 per cent of all freight loss and damage claims
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This amount represented 96 per cent carload business and only 4 per cent less-than-carload.

A glance at the division of all claims among these three causes for the years 1921, 1922, 1923, and 1924 indicates that little change has taken place except in the reduction of the percentage of loss claims and an increase in damage and delay claims. Efforts directed against robbery and pilferage have apparently borne fruit, but damage and delay claims have not been so successfully reduced.

An examination of the total amounts in loss and damage claims paid by member carriers of the Freight Claim Division of the American Railway Association during the ten-year period 1914-1923, indicates that nearly 1.75 per cent of the total freight revenues earned by these carriers—the leading carriers of the United States and Canada—is paid back to claimants for loss and damage to their goods.

SUMMARY OF PERCENTAGE DIVISION OF ALL FREIGHT LOSS AND DAMAGE CLAIMS*

Cause	Percentage			
	1921	1922	1923	1924
Total loss claims.....	40.6	36.2	29.9	25.2
Total damage claims.....	48.6	53.4	56.6	59.0
Total delay claims.....	10.8	10.4	13.5	15.8
ALL CAUSES.....	100.0	100.0	100.0	100.0

* Source: Proceedings of the Freight Claim Division, American Railway Association, 34th Annual Session, Kansas City, Mo., 1925.

Prior to the War the ratio of claims paid to revenue earned had declined from 1.59 per cent in 1914 to 0.91 per cent in 1916. In 1917 and 1918 a slight increase is noted, followed by a tremendous increase in the years 1919 to 1921 inclusive. The largest ratio on record is that of the year 1919, when nearly 3 per cent (2.95 per cent) of revenues were returned in form of claims. A more satisfactory condition is revealed by the figures for 1923 and 1924. In the latter years the rail carriers hauled more freight than ever before and earned greater freight revenues than for any other years in the history of American railroads and had a smaller ratio of claims to freight revenues than in any year since 1908.

A large amount of this credit must be given to the efforts in the direction of claim prevention fostered by the American Railway Association and to the coöperation of shippers and consignees. Educational campaigns have been conducted throughout the country by the rail carriers, express companies, shippers, and railroad associations to impress upon all concerned the importance of "shipping right," and of "handling right." As the results of this educational work, a substantial reduction in the amount and percentage relationship of claims to freight revenues is to be expected. The ultimate goal of all is not to collect the

amount which should be paid in legitimate claims but, as nearly as possible, to remove the causes of claims.

STATEMENT OF LOSS AND DAMAGE CLAIMS PAID BY MEMBER CARRIERS OF THE AMERICAN RAILWAY ASSOCIATION FREIGHT CLAIM DIVISION *

Year Ending	Amount Paid in Claims	Freight Revenue	Ratio of Claims Paid to Freight Revenue Per Cent
June 30, 1914..	\$ 33,671,219	\$ 2,111,397,400	1.59
June 30, 1915..	29,528,016	1,981,746,040	1.49
Dec. 31, 1916..	23,346,965	2,565,600,550	0.91
Dec. 31, 1917..	35,079,757	2,829,989,274	1.24
Dec. 31, 1918..	55,852,797	3,447,703,518	1.62
Dec. 31, 1919..	104,587,174	3,884,310,983	2.95
Dec. 31, 1920..	119,833,127	4,706,227,594	2.78
Dec. 31, 1921..	92,276,319	3,910,013,516	2.36
Dec. 31, 1922..	48,084,955	4,007,079,583	1.20
Dec. 31, 1923..	49,540,377	4,718,131,428	1.05
Dec. 31, 1924..	48,262,543	4,340,607,525	1.06
TOTAL.....	\$640,063,249	\$38,512,807,411	....
TOTAL TEN YEARS 1914-1923	\$591,800,706	\$34,172,199,886	....
AVERAGE TEN YEARS 1914-1923	\$59,180,070	\$3,417,219,988	1.72

* Source: Records of Secretary, Freight Claim Division, American Railway Association.

Those Entitled to File Claims

Usually the person possessing title to the goods lost, damaged or delayed is the party entitled to file claim for reimbursement against the carrier. Ordinarily the possession of the original bill of lading, properly indorsed if it is a negotiable order bill, is adequate proof of ownership of the freight described. In interstate commerce, however, such possession of the original bill of lading is not always conclusive but merely prima facie evidence of ownership of the goods. A number of state statutes specifically require the carriers in intrastate commerce to deliver goods

to whoever presents the original bill of lading covering the shipment.

Section 20, paragraph 11, of the Act to Regulate Commerce, as amended, provides that any common-carrier railroad or transportation company subject to the provisions of this act shall issue bill of lading for property received by it for transportation in interstate commerce and shall be liable to the lawful holder of such bill of lading for loss or damage to the property by itself or connections, when the goods are transported on through bill of lading.³

The Bills of Lading Act of August 29, 1916 (39 Statutes at Large 538), contains several sections applicable to the liability of carriers in interstate commerce to the holders of bills of lading, covering property which is not delivered or which fails to correspond when delivered to the description contained in the bill of lading contract.

Section 8 of the Act provides that:

A carrier, in the absence of some lawful excuse, is bound to deliver goods upon a lawful demand made either by a consignee named in the bill for the goods or, if the bill is an order bill, by the holder thereof, if such a demand is accompanied by:

- (a) An offer in good faith to satisfy the carrier's lawful lien upon the goods;
- (b) Possession of the bill of lading and an offer in good faith to surrender, properly endorsed, the bill which was issued for the goods, if the bill is an order bill; and
- (c) A readiness and willingness to sign, when the goods are delivered, an acknowledgment that they have been delivered, if such signature is requested by the carrier.

In case the carrier refuses or fails to deliver the goods, in compliance with a demand by the consignee or holder so accompanied, the burden shall be upon the carrier to establish the existence of a lawful excuse for such refusal or failure.

Section 22 of the same Act provides that:

³The Cummins Amendment, as amended, 38 Statutes at Large 1197; 41 Statutes at Large 494; 38 Statutes at Large 584.

If a bill of lading has been issued by a carrier or on his behalf by an agent or employee the scope of whose actual or apparent authority includes the receiving of goods and issuing of bills of lading therefor for transportation in commerce among the several states and with foreign nation the carrier shall be liable to:

(a) the owner of the goods covered by a straight bill, subject to existing right of stoppage in transit, or,

(b) the holder of an order bill, who has given value in good faith, relying upon the description therein of the goods, for damages caused by the nonreceipt of the goods or their failure to correspond with the description thereof in the bill at the time of its issue.

Section 17 of the Act sets forth the principle that:

If more than one person claim the title or possession of goods, the carrier may require all known claimants to interplead, either as a defense to an action brought against him for nondelivery of the goods or as an original suit, whichever is appropriate.

Section 9 provides that:

A carrier is justified, subject to the provisions of the three following sections, in delivering goods to one who is:

(a) A person lawfully entitled to the possession of the goods, or

(b) The consignee named in a straight bill for the goods, or

(c) A person in possession of an order bill for the goods, by the terms of which the goods are deliverable to his order; or which has been indorsed to him, or in blank by the consignee, or by the mediate or immediate indorsee of the consignee.

The Measure of Damages

One of the most mooted questions in connection with freight claims is the calculation of the exact amount of damages. The uniform bill of lading contract provides that the amount of any loss or damage for which any carrier is liable shall be computed on the basis of the actual value of the goods, unless a lower value "has been represented in writing by the shipper or has been agreed upon

in writing as the released value of the property as determined by the classification or tariffs upon which the rate is based, such lower value plus freight charges, if paid, shall be the maximum amount to be recovered, whether or not such loss or damage occurs from negligence.”⁴

The Cummins Amendment of March 4, 1915, to the Act to Regulate Commerce, previously referred to, provides for the liability of carriers subject to the Act on the basis of the full actual loss, damage, or injury to the goods covered by the bill of lading contract.⁵ The question of measurement of loss therefore becomes one of paramount importance. This question came before the U. S. Supreme Court and was decided on May 17, 1920, in *McCaull-Dinsmore Company v. the Chicago, Milwaukee and St. Paul Railway Company* (253 U. S. 96-97). This opinion has been so widely misinterpreted that a review of the facts of this celebrated case is deemed advisable.

The McCaull-Dinsmore Company, a corporation trading in grain, delivered on November 17, 1915, at Three Forks, Montana, a shipment of 1,464 bushels or 87,840 pounds of No. 2 Hard Montana wheat to the Chicago, Milwaukee and St. Paul Railway Company. The shipment was consigned to the McCaull-Dinsmore Company at Omaha, Nebraska, and moved from the point of origin in C. P. R. car 210470. The bill of lading contract executed to cover the shipment was of the type known as a uniform bill of lading which stipulated that the rate of freight named in contract was based upon and controlled by the provisions of the bill of lading. One of the clauses of the bill of lading read: “The amount of any loss or damage for which any carrier is liable shall be computed on the basis of the value of the property at the place and time of shipment under this bill of lading, including freight charges if paid.”

⁴Uniform Domestic Bill of Lading, Sec. 2(a), prescribed March 15, 1922.

⁵33 Statutes at Large 1196.

A shipper wishing to ship his goods under a special arrangement not governed by the terms of the bill of lading contract was accorded that privilege, and is yet, by Rule I of the Western Freight Classification.⁶ This was not taken advantage of by the shipper in this case.

The car containing the shipment was wrecked in transit on or about December 5, 1915, and the wheat became so mixed and commingled with wheat of other persons as to cause its identity to be lost and no part of the shipment was transported to destination.

Ten days was agreed upon as being a reasonable time for the transportation of this shipment from Three Forks, Montana, to Omaha, Nebraska. The price of the wheat at time and place of shipment was 82 cents per bushel, and fair market value at place of destination on November 27, the date when it should reasonably have been delivered, less freight charges which were not paid but with interest on the amount involved in the claim, amounted to \$1,422.11.

The McCaull-Dinsmore Company instituted proceedings to recover this amount in the United State District Court, Fourth Division of Minnesota. Judge Morris, who presided, handed down a written opinion deciding for the plaintiff, holding that the stipulations in the bill of lading restricting claims to the value of the goods at time and place of shipment were obnoxious to the Cummins Amendment which provided that:

The carrier shall be liable for the full actual loss caused by it, notwithstanding any limitation of liability or limitation of the amount of recovery or representation or agreement as to value in any such receipt, bill of lading, or any contract, rule, regulation or in any tariff filed with the Interstate Commerce Commission; and any such limitation without respect to the manner or form in which it is sought to be made, is hereby declared to be unlawful and void.

⁶ See Rule I, Consolidated Freight Classifications, Nos. 1, 2, 3, 4.

The question before the court was not the measurement of damages upon the values at origin or destination but whether the terms of the bill of lading contract limiting the recovery to value at time and place of origin was a valid contract as measured by the terms of the Cummins Amendment of March 4, 1915, recited above.

Judge Morris decided that it was not, and his opinion was affirmed upon appeal by the U. S. Circuit Court of Appeals for the Eighth Circuit, Judge Stone presiding. This judgment was reviewed by the U. S. Supreme Court and affirmed in an opinion of that court, Justice Holmes delivering the opinion.

The U. S. Supreme Court, despite the belief of many to the contrary, did not change the measure of damages for loss or damage of goods in transit. It did, however, decide against the reasonableness of the provision of the bill of lading terms and conditions limiting recovery to value at time and place of shipments.

The actual measure of damage is the full actual loss and evidence must be presented to show just how such actual loss is determined. Invoices, contracts, market reports showing the value of similar goods in good condition at the market at the time delivery should have been made and sales reports indicating the actual sales price of the goods as received must be furnished by claimants to support claims. If there is no definitely ascertainable market price at the time or place of delivery the invoice value is the customary basis upon which claims are filed. If the freight charges have been prepaid, the carriers must refund such payments.

Loss due to conversion of property by the carrier to its own use, or due to wrong delivery by the carriers, is usually compensated for on the basis of the price prevailing at destination at the time delivery should have been made to the proper consignee.

Partial losses and damage to portions of shipments are governed by the same general principles. Partial loss claims are filed upon the basis of the value of the goods lost and a pro rata amount of any freight charges which have been prepaid. Partial damage claims are measured by the actual value of the damaged goods. Unless the damage is so material as to amount to total destruction, no pro rata adjustment is usually made for the prepaid freight charges upon the damaged portion of the shipments. Claims of this character, as well as those for total loss or damage to the entire consignment of goods, are governed by the principles of limited liability, in case shipments have been made at reduced rates based upon released valuation, or at common-law liability, in case shipments have been made in accordance with special arrangement as provided for in Rule I of the Consolidated Freight Classification.

Overcharge Claims

The measurement of overcharge claims depends upon the nature of the error. The charges which should have been assessed are computed and claims are filed for the differences between the higher charges actually paid and the amounts which should have been assessed. There is only one legal rate, proper classification rating, correct weight, and proper routing for which a shipment is to be billed. Carriers, therefore, must refund any excess resulting from higher charges being assessed.

Claims for overcharge may be filed against the carriers by either the shipper or the consignee, depending upon which party has paid the incorrect freight charges upon a particular shipment. The test is, "Which party suffered because of the assessment of improper charges?" The party suffering the loss is the one to be compensated.

The Interstate Commerce Commission has expressed its opinion upon overcharge claims in two important Confer-

ence Rulings. Conference Ruling 323, of June 8, 1911, issued in lieu of three previous rulings, states:

The Commission has no authority to control the disposition of an overcharge. The Carrier must charge no other than its lawful rate and the failure to collect the full rate as to any shipment is a violation of the law, as is the collection of more than the full rate. The Commission declines to declare that overcharge may be offset as against an uncollected undercharge; such offset is not within the power of the Commission to authorize or condemn.¹

Conference Ruling 489, of February 18, 1916, deals with interest charges in connection with overcharge claims. This ruling reads as follows:

Interest on an overcharge (by which is meant the amount collected on a shipment in excess of the legally published rate), accrues from the date of its collection by the carrier, whether arising from an error in rate, weight, or classification.

The Commission does not regard it as unlawful for a claimant to accept in satisfaction of this claim the ascertained amount of an overcharge without interest; and the Commission is of the opinion that when such a refund is made by the carrier within 30 days after the improper collection of the overcharge, it may be regarded, in accordance with a well-established usage, as a cash transaction upon which interest does not accrue.

The views expressed in this ruling shall be understood as applying to all pending and unsettled overcharge claims and to those arising in the future, but not as authorizing or requiring the reopening of any claim which has been settled and closed by the acceptance by a claimant of the amount of an overcharge without interest.²

Duties of the Carriers

Claims may be filed against any one of the several carriers handling a shipment over a joint route. Ordinarily, claims are presented by the owners of the property dam-

¹ I. C. C. Conference Rulings (Government Printing Office, Washington, D. C.).

² *Ibid.*

aged or by those paying illegal freight charges against either the initiating or delivering carrier. It is the duty of the carriers, provided the claim is presented within the time limit of six months on domestic and nine months on export traffic after delivery or a reasonable time of delivery, to investigate the matter and, if the claim is found to be a proper one, to pay it.⁹ Claims, however, must not be paid without investigation of their legitimacy by the carriers. Such a course would lay the offending carriers open to a charge of rebating.

The Interstate Commerce Commission has expressed itself in no uncertain terms upon this subject in two Conference Rulings. Ruling 462, of April 25, 1914, states:

A carrier cannot shield itself from responsibility in paying a claim by accepting the authority of a connecting line to pay it, but must ascertain the lawfulness of the claim and allow it or not allow it upon the basis of its own investigation. This is not to be understood, however, as requiring each carrier interested in the claim to make an independent investigation. The principle of direct investigation embodied in the Rules of the Freight Claim Association (now the Freight Claim Division, American Railway Association), whereby the carrier against which a claim is presented undertakes to make the investigation for itself and for the other carriers concerned in the joint movement out of which the claim arises, is approved by the Commission as a means of expediting the adjustment of claims. In all cases, however, the investigation so made must be thorough and must disclose a lawful basis for payment before the claim is adjusted.¹⁰

The Commission, previously, in Conference Ruling No. 236, November 22, 1909, had expressed itself upon the legality of the practice of paying claims in advance of investigation. The Commission said:

... It is not a proper practice for railroad companies to adjust claims immediately upon presentation and without in-

⁹ See Uniform Domestic Bill of Lading, Sec. 2, par. (b).

¹⁰ See I. C. C. Conference Rulings 15, 68, 236, 462.

vestigation. The fact that the shippers may give bonds to secure repayment, in case upon subsequent examination their claims prove to have been improperly adjusted, does not justify the practice. Carriers that have adopted this practice will be expected to promptly discontinue it."

The attitude of the Interstate Commerce Commission with reference to the payment of claims by carriers without investigation has been amplified by the decision of the Supreme Court of the United States. It held such payments to be illegal in the case of the Charleston and Carolina Railroad *v.* the Varnville Company (237 U. S. 597).

Fraudulent Claims

The Acts of Congress, the rulings of the Interstate Commerce Commissions, and the efforts of organizations of carriers and shippers have been directed toward the enforcement of reasonable and proper presentation, investigation, and payment of claims so that the best interest of transportation may be served. The number of documents, the intricacy of their preparation, the time consumed in investigation, and the degree of care in paying the claims may appear at first glance to be useless technical obstacles in the path of the claimant. Carriers and shippers alike must assure themselves of the validity of the claims and protect themselves against the improper presentation or payment of claims for refunds of money which result in lower transportation rates being paid by some shippers or consignees than are paid for similar transportation service by others.

Carriers or their agents, failing to observe these precautions as to proper payment of claims so that certain shippers or consignees obtain the benefit of illegal transportation charges, are liable to the penalties of fine and imprisonment, if the offense is willful.

Section 10, paragraph 2, of the Act to Regulate Commerce, as amended, provides in this connection that:

Any common carrier subject to the provisions of this Act, or, whenever such common carrier is a corporation, any officer or agent thereof, or any person acting for or employed by such corporation, who, by means of false billing, false classification, false weighing, or false report of weight, or by any other device or means, shall knowingly and wilfully assist, or shall willingly suffer or permit, any person or persons to obtain transportation for property at less than the regular rates then established and in force on the line of transportation of such common carrier, shall be deemed guilty of a misdemeanor and shall upon conviction . . . be subject to a fine of not exceeding five thousand dollars or imprisonment in the penitentiary for a term of not exceeding two years, or both, in the discretion of the court for each offense.

Section 10, paragraph 3, of the Act applies the same fine and imprisonment penalties to shippers found guilty of receiving such improper rates by any form of willful false statement including fraudulent claims.¹¹

Time Limits to the Filing of Claims and Institution of Suits

The uniform bill of lading contract provides, section 2, paragraph (b), for the time within which claims for loss or damage must be filed. The paragraph reads:

Claims for loss, damage, or injury to property must be made in writing to the originating or delivering carrier or carriers issuing this bill of lading within six months after delivery of the property (or in case of export traffic, within nine months after delivery at port of export), or, in case of failure to make delivery, then within six months (or nine months in case of export traffic) after a reasonable time for delivery has elapsed; provided that if such loss, damage, or injury was due to delay or damage while being loaded or unloaded, or damaged in transit

¹¹ 24 Statutes at Large 379; 25 Statutes at Large 855; 36 Statutes at Large 539; 41 Statutes at Large 483.

by carelessness or negligence, then no notice of claim nor filing of claim shall be required as a condition precedent to recovery.²³

The limitation as to time within which claim must be filed does not apply, it will be noted, to claims arising out of damage while being loaded or unloaded, or due to carelessness or negligence while in transit. Carriers responsible for such losses and damage are presumed to be informed of the circumstances and aware of their liability.

Section 2, paragraph (b), of the uniform bill of lading contract, further provides that:

Suits for loss, damage, injury, or delay shall be instituted only within two years and one day after delivery of the property, or in case of failure to make delivery, then within two years and one day after a reasonable time for delivery has elapsed: Provided, that in case the claim on which suit is based was made in writing within six months, or nine months in case of export traffic (whether or not filing of such claim is required as a condition precedent to recovery), suit shall be instituted not later than two years and one day after notice in writing is given by the carrier to the claimant that the carrier has disallowed the claim or any part or parts thereof specified in the notice.

A shipper who has neglected to file a claim in writing within six months, or a notice as to his intention of filing such a claim, where the loss, injury, or damage was not due to delay or damage while the shipment was being loaded or unloaded, or caused through the negligence or carelessness of the carriers, is barred from seeking recovery through court action.

On the other hand, a shipper who has properly filed his claim in writing within six months or who has presented the equivalent, namely, an intention of filing a claim in the future, may proceed against carriers in a court action for recovery of damages wherever he feels that no voluntary

²³ See Sec. 16, par. 3, Act to Regulate Commerce, as amended.

redress is to be expected from the carriers. Such court action must be started within two years and one day after delivery of the property or reasonable time for delivery in case of claims filed for reimbursement for loss.

If the property was never delivered, the period from which the time limitation of two years and one day should be computed would be the approximate date on which a delivery could have been reasonably expected if the cause of nondelivery had been avoided.

An important condition precedent to recovery of claim in interstate commerce, whether such recovery is sought through claim against the carriers or through court action, is the actual filing of the claim within the required period, or the filing of an intention to do so. Failure to do this bars recovery. The second condition precedent to recovery is that all such claims which have been filed with the carriers within the required time limitation must be brought as a court action within two years and one day after delivery of the property; or, in case of nondelivery, then two years and one day after a reasonable time for delivery has elapsed.

However, in cases where the loss, damage, or injury was due to delay or damage while the property in interstate commerce was being loaded or unloaded, or where the damage occurred in transit because of the negligence or carelessness of carriers, no time limitation within which such claims must be filed is prescribed, nor is the filing of a notice of intention to file claim required. The one condition precedent to recovery through court action is that such suits must be instituted within two years and one day after delivery or within two years and one day after a reasonable time for delivery has elapsed.

Prior to the enactment of the Transportation Act of 1920, many claims, although filed with the carriers within the prescribed periods of six or nine months, became out-

lawed. Shippers frequently lost their rights to recover through court action whenever investigation of the merits of the claims by the carriers required a period of two years, or close to that period, before settlement by carriers was finally declined. In such instances it was often too late to resort to court action, and the shippers were deprived of their constitutional rights to secure redress by instituting suit.

Congress, when framing the Transportation Act, 1920, took cognizance of the unjust and discriminatory position in which shippers were placed and amended the third proviso of the eleventh paragraph of Section 20 of the Interstate Commerce Act.¹⁸

Suits shall be instituted not later than two years and one day after notice in writing is given by the carrier to the claimant that the carrier has disallowed the claim or any part or parts thereof specified in the notice.

By this amendment shippers are allowed a period of two years and one day after the carriers have finally declined a claim in which to prosecute settlement of such declined claim through court action. It does not matter about the length of time a carrier's investigation may require before finally disallowing the claim, shippers still have the two years and one day period in which to institute suit.

In the case of overcharge claims, the time limitations imposed by the bill of lading contract, within which claims must be filed, do not apply. Carriers up to February, 1923, paid provable overcharges if claims were presented within the time limits provided by the statutes of limitations of the various states in which such overcharge claims were filed. On February 19, 1923, the Supreme Court, in the case of the *Kansas City Southern Railway Company v. Wolf, et al.*, held that actions begun in the courts for the recovery of

¹⁸ Sec. 438, Transportation Act, 1920.

charges, said to be in excess of the published rates when properly applied, must be filed within the two-year-and-one-day period provided for by the bill of lading contract for filing claims for loss, damage, and injury to property, and by the Interstate Commerce Act. This period of time was extended to three years by Act of Congress, July 7, 1924, amending Section 16 of the Interstate Commerce Act. The lapse of time, the court held, destroyed any liability by the carrier to the shipper for the alleged overcharge. The lapse of time not only bars the remedy but destroys the liability. Carriers are bound therefore to claim the benefit of the limitation imposed by the statute, the Act of 1920, and by the bill of lading.¹⁴

The Interstate Commerce Commission immediately took cognizance of this decision and published the following Conference Ruling:

Upon inquiries as to the effect of the decision rendered on February 19, 1923, by the Supreme Court of the United States, in *Kansas City So. Ry. v. Wolf*, 261 U. S. 133, the Commission construes that decision and paragraph 3 of section 17 of the Interstate Commerce Act as prohibiting common carriers subject to the Act from paying, subsequent to the two-year period of limitation contained in that paragraph, claims for overcharges presented to the carriers by shippers or consignees either within or subsequent to said two-year period of limitation, unless within said two-year period the claims have been presented to the Commission or to a court of competent jurisdiction in accordance with the applicable provisions of said Act.

Standard Freight Claim Forms and Supporting Documents

The Interstate Commerce Commission, the Freight Claim Division of the American Railway Association, and the National Industrial Traffic League have approved the use

¹⁴ *Kansas City Southern Ry. Co. v. Wolf, et al.* (261 U. S. 133). See also *Phillips Co. v. Grand Trunk Western Ry.* (236 U. S. 662, 667).

of standardized forms to be used in the filing of loss, damage, overcharge, and concealed loss and damage claims against the carriers. These forms are prepared to present the facts and documents needed to support claims in a concise and orderly manner so that the situation complained of may be clearly impressed upon the carriers and the settlement of claims facilitated. General Orders Nos. 41 and 55 of the Director General, U. S. Railway Administration, prescribed the use of these forms, and many claimants have continued their use since the resumption of private railroad operation. The convenience of standardized forms is obvious.

The proper preparation of claim papers is important in order that ample proof of loss may be made in a clear and understandable manner establishing the existence of liability on the part of the carrier and the exact nature and extent of the loss of which complaint is made. "A properly prepared claim is halfway to the voucher desk," is an axiom among traffic managers.¹⁵

The Standard Form for Presentation of Loss and Damage Claims, a copy of which is shown in Figure 45, contains spaces for a detailed statement as to the names and addresses of claimant, carrier to whom presented, consigner, and consignee; claimant's claim number as well as carrier's number; a complete description of the shipment; the amount of the claim; the points of shipment and destination; the full routing of shipment; the dates of claim and bill of lading; the name of carrier issuing bill of lading; the number of paid freight bill; the original car initial and number; notations of any reconsignments or diversions en route.

The form also provides a space for a detailed statement

¹⁵ Quoted from article by H. R. Park, Traffic Manager, Chicago Live Stock Exchange, "Preparation of Freight Claims," *Trade and Transportation Bulletin*, September, 1924.

Standard Form for Presentation of Loss and Damage Claims

Approved by the Interstate Commerce Commission, December 2, 1913,
The Freight Claim Association and National Industrial Traffic League

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<hr/> <div>(Name of Person to whom Claim is Presented)</div> <hr/>	<hr/> <div>(Claimant's Number)</div> <hr/>
<hr/> <div>(Name of Carrier)</div> <hr/>	<hr/> <div>(Carrier's Number)</div> <hr/>
<hr/> <div>(Address)</div> <hr/>	<hr/> <div>(Amount of Claim)</div> <hr/>

This claim is made by _____ (Name of Claimant)

_____ (Street and Number, P. O. Box or R. F. D.) _____ (City or Town) _____ (State)

for _____ in connection with the following described shipments:

_____ (Loss or damage)

Description of shipment _____

Name and address of consignor (shipper) _____

Shipped from _____ To _____

_____ (City, town or station) _____ (City, town or station)

Final Destination _____ Route via _____

_____ (City, town or station)

Bill of Lading issued by _____ Co.; Date of Bill of Lading _____

Paid Freight Bill (Pro) Number _____; Original Car Number and Initial _____

Name and address of consignee (Whom shipped to) _____

If shipment recognized enroute state particulars _____

DETAILED STATEMENT SHOWING HOW AMOUNT CLAIMED IS DETERMINED

(Number and description of articles, nature and extent of loss or damage, invoice price of articles, amount of claim, etc.)

Total Amount Claimed

IN ADDITION TO THE INFORMATION GIVEN ABOVE, THE FOLLOWING DOCUMENTS ARE
SUBMITTED IN SUPPORT OF THIS CLAIM:

1. Original bill of lading, if not previously surrendered to carrier.
2. Original paid freight ("expense") bill.
3. Original invoice or certified copy
4. Other particulars obtainable in proof of loss or damage claimed.
5. If loss concerned loss or damage, statement of shipper and consignee.

3. If for concealed loss or damage, statement of shipper and consignee on standard forms, Pennsylvania Railroad System forms No. F. D. 1591 and F. D. 1593 or like forms of shipper and consignee.

Remarks

The foregoing statement of facts is hereby certified to be correct.

(Signature of Chaboud)

§ Claimant should assign to each claim a number, inserting same in the space provided at the upper right hand corner of this form. Reference should be made thereto in all correspondence pertaining to this claim.

* Claimant will please place check (x) before each of the documents mentioned as have been attached, and explain under "Remarks" the absence of any of the documents called for in connection with this claim. When for any reason it is impossible for claimant to produce original bill of lading, or paid freight bill, claimant should indemnify carrier or carriers against duplicate claim supported by original documents.

Claimants will please show correctly and distinctly their name and address including street and number, Post Office box number or Rural Free Delivery (R. F. D.) number

Claimants will please advise carrier promptly if claim is for shortage and missing property is received or located after presentation of claim. (See quotation from Section 10 of the Act to Regulate Commerce, appearing on back of this form.)

FIG. 45. STANDARD FORM FOR PRESENTATION OF LOSS AND DAMAGE CLAIMS

Standard Form for the Handling of Concealed Loss and Concealed Damage Claims
*(Recommended by Committee of Shipping Interests and the Conference Committee of The Freight
 Claim Association in joint session, New York, November 27th, 1917)*

SHIPPER'S FORM

Information in Lieu of Affidavit Required from Shipper in Support of Claim for Concealed Loss or Concealed Damage

Shipper's Claim No. _____ Consignor's Claim No. _____

DESCRIPTION OF SHIPMENT

Point of Origin _____ Destination _____
 Date _____ Number of Packages _____
 Shipper _____ Consignee _____
 Commodity _____

INFORMATION REQUIRED	ANSWERS
1. When were the goods packed, if known? _____	_____
(a) Where were the goods packed? _____	_____
2. Were all the articles for which claim is made packed in container and in good order? _____	_____
(a) Does your record indicate whether or not the container was packed to its full capacity with the property shipped? _____	_____
(b) If not packed full, what material occupied the remaining space? _____	_____
3. Was the package protected against abstraction of or damage to contents by being strapped, sealed, corded or otherwise specifically protected? _____	_____
(a) If so, how? _____	_____
4. On what date was the shipment delivered to truckman? _____	_____
(a) Was the shipment delivered truckman before or after 12 o'clock Noon? _____	_____
(b) Was the delivery made to the carrier by your own truck? _____	_____
(c) If not, give name of trucking company _____	_____
(d) Give name of driver in either case, if known _____	_____
(e) If not delivered by truck, state how delivered _____	_____

I hereby certify the foregoing statement of facts to be true in every particular, to the best of my knowledge and belief.

Dated at _____ Signature _____

Date _____ 192 _____

in what capacity employed _____

FIG. 46. STANDARD FORM FOR PRESENTATION OF CONCEALED LOSS AND CONCEALED DAMAGE CLAIMS: SHIPPER'S FORM

showing how the amount claimed is determined, and by providing a list of documents to be submitted in support of claim, it calls attention of the claimant to the shipping papers and other documents which must be attached. The

Standard Form for the Handling of Concealed Loss and Concealed Damage Claims
(Recommended by Committee of Shipping Interests and the Conference Committee of The Freight Claim Association in joint session, New York, November 27th, 1917.)

CONSIGNEE'S FORM

Information in Line of Affidavit Required from Consignee in support of Claims for Concealed Loss or Concealed Damage
 Shipper's Claim No. _____ Consignee's Claim No. _____

DESCRIPTION OF SHIPMENT

Point of Origin _____ Destination _____
 Date _____ Number of Packages _____
 Shipper _____ Consignee _____
 Commodity _____

INFORMATION REQUIRED	ANSWERS
1. Was the shipment handled by your truck? _____ (a) If not, give name of trucking company _____ (b) Give name of driver in either case, if known _____ (c) If not received by truck, state how received _____	_____
2. On what date was shipment received at your place of business? _____	_____
3. On what date was loss or damage discovered? _____ (a) By whom discovered? _____	_____
4. On what date was carrier notified of the loss or damage? _____ (a) Who was notified of loss or damage? _____ (b) If inspected, by whom and on what date? _____ (Note: Attach hereto any report inspector made.)	_____
5. What condition of contents, wrappers or cartons indicated loss or damage? _____	_____
6. Kind of package _____ (a) Of what material constructed? _____	_____
7. Was examination of container made before opening? _____ (a) Was examination of container made after opening? _____ (b) What evidence was there, if any indicating that the container had been tampered with? _____ (c) Was container sealed, strapped or corded? _____	_____
8. Was the container packed to its full capacity with the property shipped? _____ (a) If not, what material occupied the remaining space? _____	_____

I hereby certify the foregoing statement of facts to be true in every particular, to the best of my knowledge and belief.
 Dated at _____
 Date _____, 19__

 Signature
 In what capacity employed _____

FIG. 47. STANDARD FORM FOR PRESENTATION OF CONCEALED LOSS AND CONCEALED DAMAGE CLAIMS: CONSIGNEE'S FORM

statements of fact presented must be subscribed to by the claimant and certified to as correct. The reverse side of the form contains a statement addressed to the claimants calling their attention to important points of law and mak-

ing recommendations concerning the preparation and presentation of loss and damage claims.¹⁶

When filing a claim for loss of freight it is advisable to file with it the following documents:

1. The original bill of lading, if it has not been previously surrendered to the carrier, or in case the claimant is unable to do this, a bond of indemnity must be given to insure the carrier against another claim being filed using original bill of lading as a supporting document.

2. The original paid freight ("expense") bill.

3. The original invoice or a certified copy of the invoice.

4. An affidavit of nondelivery of freight is not so essential as the preceding documents but may be filed to avoid delays caused by the incompleteness of delivering agents' records. In cases of partial loss claims, it is desirable to obtain a notation of loss on the freight bill stating the amounts missing on delivery, although the absence of such notation is not fatal to the successful presentation of the claim. If a claim involves a concealed loss, affidavits of the shipper, consignee, draymen, and all parties handling the shipment while out of the possession of the carrier are desirable. In case of such a loss, moreover, the carriers now usually ask both the shipper and consignee to fill out special Concealed Loss and Damage Forms containing specific inquiries as to the handling of the shipment. Figures 46 and 47 indicate the nature of the questions.

¹⁶ The instructions carried on the reverse side of the form are as follows:

TO CLAIMANTS:

Persons presenting claims to a carrier will expedite settlement by furnishing the carrier with a complete and detailed statement of all pertinent facts tending to establish the validity of their claims. It is the desire of carriers to settle promptly all valid claims, and the frank and hearty co-operation of the claimant is therefore solicited. *Delayed settlement of claims is frequently due to the failure of the claimant to furnish carrier with the necessary information and documents with which to make investigation and establish liability promptly. It should be borne in mind that carriers under the terms*

If loss is due to leakage of grain or liquids, it is desirable, and in some states it is in fact legally required, that the claim be further supported by market or sales reports,

of the Act to Regulate Commerce are required to thoroughly investigate each claim before payment. Claimants should, therefore, in every case furnish the carrier, as far as possible, with the information and documents called for on the other side of this form, even though there may be instances when it appears to the claimant that the information called for is more than necessary to establish the validity of the claim. There are claims, e.g., for concealed loss or damage, in connection with which it may be necessary to call for additional information from the claimant before making settlement.

Claimants are requested to make use of this form for filing claims with carriers. Claims may be filed with the carrier's agent either at the point of origin or destination of shipment, or direct with the Claim Department of the carrier, and will be considered properly presented only when the information and documents called for on the other side of this form have, as far as possible, been supplied. A duplicate copy thereof should be preserved by the claimant.

Claimant should read carefully the information appearing below.

IMPORTANT INFORMATION TO CLAIMANTS RESPECTING LOSS AND DAMAGE CLAIMS

Before presenting a claim on account of loss and damage, the following important information respecting claims should be given careful consideration:

1. The terms under which property is accepted and transported by a carrier are stated on the bill of lading issued by the carrier; also in tariffs and classifications issued or subscribed to by the carrier. Persons intending to file claims should, before doing so, examine the terms and conditions under which property was accepted and transported. If any part of the shipment in question was subject to the Regulations for the Transportation of Explosives and Other Dangerous Articles, prescribed by the Interstate Commerce Commission, pursuant to Acts of Congress, the person filing the claim should know that all of these regulations applicable to the shipment had been complied with.

2. Carriers and their agents are bound by the provisions of law, and any deviation therefrom by the payment of claims before the facts and measure of legal liability are established will render them, as well as the claimant, liable to the fines and penalties by law. Attention is called to the following extract from Interstate Commerce Commission Conference Ruling No. 68:

"It is not the proper practice for railroad companies to adjust claims immediately on presentation and without investigation. The fact that shippers may give bond to secure repayment in case, upon subsequent examination, the claims prove to have been improperly adjusted, does not justify the practice."

affidavits of loading and unloading, and weight or weigh-masters' or gaugers' certificates.

3. In order that the carrier may have an opportunity to inspect goods and thereby properly verify claims, any loss or damage discovered after delivery should be reported to the agent of the delivering line, as far as possible, immediately upon discovery, or within forty-eight hours after receipt of goods by consignee.

4. Pending the settlement of any dispute or disagreement between the consignee and the carrier as to questions of loss and damage in connection with property transported, the consignee may avoid a possible accrual of demurrage or storage charges as well as other loss or damage, by promptly accepting the property from the carrier. Such action on his part in no way affects any valid claim which may exist against the carrier.

5. Under the provisions of the 6th section of the Act to Regulate Commerce, it is unlawful for a carrier to charge or demand or collect or receive any greater or less or different compensation for the transportation of property than the rates and charges named in tariffs lawfully on file, nor to refund or remit in any manner or by any device any portion of the rates and charges so specified. The refund or remission of any portion of the rates and charges so specified through the payment of fraudulent, fictitious or excessive claims for loss of or damage to merchandise transported is as much a violation of the law as is a direct concession or departure from the published rates and charges.

In this connection attention is also called to the following important quotation from section 10 of the Act to Regulate Commerce:

"Any common carrier subject to the provisions of this Act, or, whenever such common carrier is a corporation, any officer or agent thereof or any person acting for or employed by such corporation, who, by means of false billing, false classification, false weighing, or false report of weight, or by any other device or means, shall knowingly and willfully assist, or shall willingly suffer or permit, any person or persons to obtain transportation for property at less than the regular rates then established and in force on the line of transportation of such common carrier, shall be deemed guilty of a misdemeanor, and shall, upon conviction thereof in any court of the United States of competent jurisdiction within the district in which such offense was committed, be subject to a fine of not exceeding five thousand dollars, or imprisonment in the penitentiary for a term of not exceeding two years, or both, in the discretion of the court, for each offense."

"Any person, corporation, or company, or any agent, or officer thereof, who shall deliver property for transportation to any common carrier subject to the provisions of this Act, or for whom, as consignor or consignee, any such carrier shall transport property, who shall knowingly and willfully, directly or indirectly, himself or by employee, agent, officer, or otherwise, by false billing, false classification, false weighing, false representation of the contents of the package or the substance of the property, false report of weight,

The supporting documents filed with a damage claim are the usual papers listed above, but, in addition, affidavits from the shipper and consignee stating the condition of the freight upon shipment and delivery may also be filed to expedite settlement. In case of concealed loss the consignee and shipper are usually asked to answer the inquiries contained in the special Concealed Loss and Damage Consignee's and Shipper's Forms.

Claims for damage due to unreasonable delay should, in addition to the usual documents, be supported by market reports showing prices ruling on the day when the grain, fruit, produce, live stock, or other freight should have arrived and sales' reports or accounts showing the price actually received for the delayed freight. In case of claim due to delay, shippers improve their position by showing that at the time the shipping contracts were made, the agents of the carriers were notified that delays in delivery

false statement, or by any other device or means, whether with or without the consent or connivance of the carrier, its agent, or officer, obtain or attempt to obtain transportation for such property at less than the regular rates then established and in force on the line of transportation; or who shall knowingly and willfully, directly or indirectly, himself or by employee, agent, officer, or otherwise, by false statement or representation as to cost, value, nature, or extent of injury, or by the use of any false bill, bill of lading, receipt, voucher, roll, account, claim, certificate, affidavit, or deposition, knowing the same to be false, fictitious, or fraudulent, or to contain any false, fictitious, or fraudulent statement or entry, obtain or attempt to obtain any allowance, refund, or payment for damage or otherwise in connection with or growing out of the transportation of or agreement to transport such property, whether with or without the consent or connivance of the carrier, whereby the compensation of such carrier for such transportation, either before or after payment, shall in fact, be made less than the regular rates then established and in force on the line of transportation, shall be deemed guilty of fraud, which is hereby declared to be a misdemeanor, and shall, upon conviction thereof in any court of the United States of competent jurisdiction, within the district in which such offense was wholly or in part committed, be subject for each offense to a fine of not exceeding five thousand dollars or imprisonment in the penitentiary for a term of not exceeding two years, or both, in the discretion of the court: Provided, That the penalty of imprisonment shall not apply to artificial persons."

would, because of changing market prices or other reason, incur special damage.

The Standard Form for Presenting Overcharge Claims is similar in many ways to the Loss and Damage Form but differs in certain respects. To prevent confusion this form is printed on yellow paper instead of the salmon paper frequently used for the Standard Form for Loss and Damage Claims. It contains, in addition to the space for detailed information as to shipper, consignee, description of shipment, and other identifying information, place for a statement of the nature of the overcharge and a detailed statement of the amount of claim. A list of supporting documents required is included, differing somewhat from those required to support loss and damage claims. The reverse side contains information for the use of shippers to be used in filing overcharge claims.¹⁷ A specimen overcharge form is shown in Figure 48.

In presenting an overcharge claim the claimant should attach the following documents:

¹⁷ The instructions carried on the reverse side of the form are as follows:

TO CLAIMANTS:

Persons presenting claims to a carrier will expedite settlement by furnishing the carrier with a complete and detailed statement of all the pertinent facts tending to establish the validity of their claims. It is the desire of carriers to settle promptly all valid claims and the frank and hearty co-operation of the claimant is therefore solicited. *Delayed settlement of claims is frequently due to the failure of the claimant to furnish carrier with the necessary information and documents with which to make investigation and establish liability promptly. It should be borne in mind that carriers under the terms of the Act to Regulate Commerce are required to thoroughly investigate each claim before payment.* Claimants should, therefore, in every case furnish the carrier, as far as possible, with the information and documents called for on the other side of this form, even though there may be instances when it appears to the claimant that the information called for is more than necessary to establish the validity of the claim.

Claimants are requested to make use of this form for filing claims with carriers. Claims may be filed with the carrier's agent, either

Standard Form for Presentation of Overcharge Claims

100

(Name of person to whom claim is presented) _____ (Name of claimant) _____

(Name of carrier) _____ (Address of claimant) _____

(Address) _____ (Carrier's Number) _____

This claim for \$ _____ is made against the carrier named above _____

for Overcharge in connection with the following described shipments:

Description of shipment _____

Name and address of consignee (shipper) _____

Shipped from _____ (City, town or station) To _____ (City, town or station)

Final Destination _____ Routed via _____

Bill of Lading issued by _____ Co.; Date of Bill of Lading _____

Paid Freight Bill (Pro) Number _____; Original Car Number and Initial _____

Name and address of consignee (When shipped to) _____

If shipment recognized enroute, state particulars _____

Nature of Overcharge _____ (Weight, rate or classification, etc.) _____

DETAILED STATEMENT OF CLAIM.

NOTE.—If claim covers more than one item taking different rates and classifications, attach separate statement showing how overcharge is determined and amount liable in space below

	NO OF PKGS.	ARTICLES	WEIGHT	RATE	CHARGES	AMOUNT OF OVERCHARGE
Charges Paid:						
		Total				
Should have been:						
		Total				

Authority for rate or classification claimed _____ (Give, so far as practicable, tariff reference (I. C. C. Number, effective date and page or item))

IN ADDITION TO THE INFORMATION GIVEN ABOVE, THE FOLLOWING DOCUMENTS ARE SUBMITTED IN SUPPORT OF THIS CLAIM*

{ } 1. Original paid freight ("expense") bill

{ } 2. Original invoice, or certified copy, when claim is based on weight or valuation, or when shipment has been improperly described

{ } 3. Original bill of lading, if not previously surrendered to carrier, when shipment was prepaid, or when claim is based on misrouting or valuation

{ } 4. Weight certificate or certified statement when claim is based on weight.

{ } 5. Other particulars obtainable in proof of Overcharge claim.d.:1

Remarks _____

The foregoing statement of facts is hereby certified to be correct.

(Signature of claimant)

(Claimant should attach to each claim a copy of the documents mentioned in the space provided at the upper right-hand corner of this form. Reference should be made thereto in all correspondence pertaining to this claim.)

*Claimant will please place check (X) before each of the documents mentioned as having been attached, and indicate under "Remarks" the nature of copy of the documents submitted in connection with this claim. Where for any reason it is impossible for claimant to produce original bill of lading, if required, or paid freight bill, claimant should indicate carrier or carriers against whom claim supported by original documents.

(Claims for overcharge on shipments of lumber should also be supported by a statement of the number of feet, dimensions, kind of lumber, and length of train as shown before being shipped.)

Claims based on rates quoted in letters from traffic officials should be supported by the original or copies of such letters.

FIG. 48. STANDARD FORM FOR PRESENTATION OF OVERCHARGE CLAIMS

1. The original paid freight ("expense") bill.
2. The original invoice or a certified copy, when the claim

at the point of origin or destination of shipment, or direct with the Claim Department of the carrier, and will be considered properly presented only when the information and documents called for on the

is based on weight or valuation, or when shipment has been improperly described.

other side of this form have, as far as possible, been supplied. A duplicate copy thereof should be preserved by the claimant.

Claimants should read carefully the information appearing below.

.Freight Claim Agent.

IMPORTANT INFORMATION TO CLAIMANTS RESPECTING OVERCHARGE CLAIMS

Before presenting a claim on account of overcharge, the following important information respecting claims should be given careful consideration:

1. The terms under which property is accepted and transported by a carrier are stated on the bill of lading issued by the carrier; also in tariffs and classifications issued or subscribed to by the carrier. Persons intending to file claims should, before doing so, examine the terms and conditions under which property was accepted and transported. If any part of the shipment in question was subject to the Regulations for the Transportation of Explosives and Other Dangerous Articles, prescribed by the Interstate Commerce Commission, pursuant to Acts of Congress, the person filing the claim should know that all of these regulations applicable to the shipment had been complied with.

2. Carriers and their agents are bound by the provisions of law, and any deviation therefrom by the payment of claims before the facts and measure of legal liability are established will render them, as well as the claimant, liable to the fines and penalties by law. Attention is called to the following extract from Interstate Commerce Commission Conference Buling No. 68:

"It is not the proper practice for railroad companies to adjust claims immediately on presentation and without investigation. The fact that shippers may give bond to secure repayment in case, upon subsequent examination, the claims prove to have been improperly adjusted, does not justify the practice."

3. Pending the settlement of any dispute or disagreement between the consignee and the carrier as to questions of overcharge in connection with property transported, the consignee may avoid a possible accrual of demurrage or storage charges as well as loss or damage, by promptly accepting the property from the carrier. Such action on his part in no way affects any valid claim which may exist against the carrier.

4. Under the provisions of the 6th section of the Act to Regulate Commerce, it is unlawful for a carrier to charge or demand or collect or receive any greater or less or different compensation for the transportation of property than the rates and charges named in tariffs lawfully on file, nor to refund or remit in any manner or by any device any portion of the rates and charges so specified. The refund or remission of any portion of the rates and charges so specified based

3. The original bill of lading, if it has not previously been surrendered to the carrier, if shipment was prepaid,

on the ground that the carrier has computed its charges on excessive weight or wrong classification is as much a violation of the law as is a direct concession or departure from the published rates and charges.

In this connection attention is also called to the following important quotation from section 10 of the Act to Regulate Commerce:

"Any common carrier subject to the provisions of this Act, or, whenever such common carrier is a corporation, any officer or agent thereof, or any person acting for or employed by such corporation, who, by means of false billing, false classification, false weighing, or false report of weight, or by any other device or means, shall knowingly and willfully assist, or shall willingly suffer or permit any person or persons to obtain transportation for property at less than the regular rates then established and in force on the line of transportation of such common carrier, shall be deemed guilty of a misdemeanor, and shall, upon conviction thereof in any court of the United States of competent jurisdiction within the district in which such offense was committed, be subject to a fine of not exceeding five thousand dollars, or imprisonment in the penitentiary for a term of not exceeding two years, or both, in the discretion of the court, for each offense."

"Any person, corporation, or company, or any agent or officer thereof, who shall deliver property for transportation to any common carrier subject to the provisions of this Act, or for whom, as consignor or consignee, any such carrier shall transport property, who shall knowingly and willfully, directly or indirectly, himself or by employee, agent, officer, or otherwise, by false billing, false classification, false weighing, false representation of the contents of the package or the substance of the property, false report of weight, false statement, or by any other device or means, whether with or without the consent or connivance of the carrier, its agent, or officer, obtain or attempt to obtain transportation for such property at less than the regular rates then established and in force on the line of transportation; or who shall knowingly and willfully, directly or indirectly, himself or by employee, agent, officer, or otherwise, by false statement or representation as to cost, value, nature, or extent of injury, or by the use of any false bill, bill of lading, receipt, voucher, roll, account, claim, certificate, affidavit, or deposition, knowing the same to be false, fictitious, or fraudulent, or to contain any false, fictitious, or fraudulent statement or entry, obtain or attempt to obtain any allowance, refund, or payment for damage or otherwise in connection with or growing out of the transportation of or agreement to transport such property, whether with or without the consent or connivance of the carrier, whereby the compensation of such carrier for such transportation, either before or after payment, shall in fact, be made less than the regular rates then established and in force on the line of transportation, shall be deemed guilty of fraud, which is hereby declared to be a misdemeanor, and shall, upon conviction

or if the claim is based on misrouting or valuation. If the bill of lading cannot be supplied, a bond of indemnity may be executed by the claimant in favor of the carrier against whom claim is made.

4. A weight certificate or certified statement when the claim is based on weight. If the claim is for overcharge on a shipment of lumber, the claim should be supported by a statement of feet, dimensions, kind of lumber, and length of time on sticks before being shipped.

5. Citation of the tariff authority should be made if the claim is based on an error in freight or classification; and if based on rates quoted in letters from traffic officials, the originals or copies of such letters should be used to support the claim.

It will be recalled in this connection that shippers cannot rely upon rate quotations made in error by agents of the carriers, even though such quotation is made in writing and results in loss to the shippers.

Section 11 of the Interstate Commerce Act, as amended by the Transportation Act of 1920, provides that a carrier, misstating, in writing, the applicable rate, in consequence of which the shipper requesting the rate suffers damage, either in shipping over a line or route for which the proper rate is higher than the rate over another available route or in entering into a contract whereunder the shipper pays the rate, shall be liable to a penalty of \$250 which shall accrue to the United States and may be recovered in civil action by the United States.

Shippers, however, have no claim upon the erring carrier. They are obliged to pay the lawful rates and the misquotation of such rates does not alter the obligation.

thereof in any court of the United States of competent jurisdiction, within the district in which such offense was wholly or in part committed, be subject for each offense to a fine of not exceeding five thousand dollars or imprisonment in the penitentiary for a term of not exceeding two years, or both, in the discretion of the court: Provided, That the penalty of imprisonment shall not apply to artificial persons."

Rail Carrier's Right of Subrogation

Section 2, paragraph (c), of the uniform bill of lading contract provides:

Any carrier or party liable on account of loss of or damage to any of said property shall have the full benefit of any insurance that may have been effected upon or on account of said property, so far as this shall not avoid the policies or contracts of insurance: Provided, that the carrier reimburse the claimant for the premium paid thereon.

A shipper cannot, therefore, profit by taking double compensation for his loss from both the insurance company and the carrier, thereby receiving double indemnity for a single loss.

Railroad Freight Claim Departments

Freight claim adjustments are handled by departments located variously in the general freight, accounting, and legal departments. For years it was customary for the claim department to be attached to the general freight departments of the larger carriers, but more recently several large roads have placed the handling of loss and damage claims with the claim department, which functions as a part of the legal department, and overcharge claim adjustments are intrusted to a subdepartment of the accounting department, reporting in many instances to an auditor of freight receipts or similar official.

The freight claim department is usually under the charge of a freight claim agent, and several assistant freight claim agents, if the road's business is of considerable volume.

These assistants may handle separate phases of the work or may have jurisdiction over the various territories served by the carrier. Each office is organized much along the same lines as the head claim office. There is usually a chief clerk with jurisdiction over the clerical work; a chief investigator handling the field inspection work; an over,

short, and damage bureau to supervise the handling of O. S. and D. freight; inspectors to personally investigate claims; a tracing bureau to trace freight; an unclaimed department handling freight on hand without marks and attempting to associate "over" freight on hand with short billing, and arranging sales by auction or otherwise of unidentifiable or refused freight after expiration of time provided for in the uniform bill of lading; and inspectors to investigate car records, seals, and damage, and to trace losses through the records of the local freight offices and with claimants.

In the overcharge claim department the typical organization has a chief clerk, with clerks handling rates, checking weights, and correcting errors in extension, and investigators who verify overcharge records, and who attempt to eliminate the causes of claims at the local stations.

Both the freight claim department and the overcharge department or bureau of the accounting department have voucher clerks under a head clerk, who verify the amounts of claims after they have been proved and who prepare the vouchers in favor of claimants for the amounts settled upon, drawing usually upon the treasury department.

The local freight agents, although employed in the operating department, also constitute part of the freight claim organization. When, upon arrival, a car contains more freight than is listed on the waybill, or when freight is received without billing, the receiving agent makes out an "over" report which identifies the waybill, car, train, seal record, and train conductor, and contains two series of inquiries to be answered respectively by the forwarding and delivering agents. Should a car arrive with less freight or the waybill be received covering more freight than is billed, the receiving agent, similarly, makes out a "short" report, and when freight arrives in a damaged condition he makes out a "damaged" or "bad order" report. These

INSPECTION REPORT OF LOSS OR DAMAGE DISCOVERED AFTER DELIVERY OF FREIGHT

Shipment of _____	From _____
Consignor _____	Consignee _____
Way-bill _____	Date _____
Pro. No. _____	Car No. _____
Initials _____	
Date shipment arrived _____	Date and hour delivered _____
Name of drayman _____	Date and hour received by consignee _____
Were goods unpacked before this inspection was made? _____	
When did consignee give notice or request inspection? _____	
If shortage claimed, what evidence did you discover indicating robbery during transportation? _____	

Was there sufficient space in package to contain missing goods? _____	
Did comparison of check with invoice, or weighing package verify loss? _____	

If wooden box, was it new? _____ Was it corded or strapped? _____	
If fibre-board box, were flaps sealed and glued? _____	
If similar inspections made of previous shipments for this consignee state circumstances and results _____	

If damage claimed, did package or contents indicate the cause? _____	

Was damage of such nature that it could have been noticed at time of delivery? _____	

If improperly boxed, crated, wrapped or packed, what change would reduce liability to damage? _____	

State fully any additional facts or information that may have material bearing upon the question of carriers' responsibility for the loss or damage claimed. If necessary, attach special memorandum hereto: _____	

Station _____	Date _____
	Inspector _____
	Consignee _____

FIG. 49. INSPECTION REPORT OF LOSS OR DAMAGE DISCOVERED AFTER DELIVERY OF FREIGHT

reports are handled variously on different lines but in all cases they constitute a part of the evidence used by the freight claim department in adjusting freight claims.

The freight agents also send out tracers to locate short freight and to fix responsibility for damaged freight. They send "refused" or unclaimed freight reports to the freight claim agent, and they forward to this officer any claims

which they receive from claimants. In case of concealed loss or damage claims the agents are usually obliged to send in special reports which have been standardized by the Freight Claim Division of the American Railway Association. When concealed loss or damage is reported to the local freight agent, arrangements are made for inspection of property so as to give the carriers an opportunity to verify immediately the damage or loss complained of (see Fig. 49).

Should the freight claim department refuse to settle a claim and the claimant then decide to bring suit against the railroad company, the case is turned over to the legal department of defense. The freight claim department co-operates by submitting facts upon which the company's attorneys base their case.

Interline Claim Settlement

The claimants' interest in freight claims naturally ceases when the claim is settled by the carrier to which presented. When the claim arises out of an interline shipment it becomes necessary for the amount to be apportioned among the carriers participating in the revenue movement. Such settlements are usually adjusted in accordance with the rules and rulings of the Freight Claim Division of the American Railway Association. Rule I of the Rules of Order of this body states the objects of the organization to be "the prompt and lawful settlement of freight claims with claimants and between carriers; also the study of claim causes and the application of preventive measures."

It has a detailed code of rules covering the procedure to be used in settlement of freight claims. These rules define the terms used in connection with claims, investigation procedure, car-sealing rules, inspection of equipment, checking of exceptions, loading and delivering freight without carrier's check, reporting refused and unclaimed freight,

handling of astray freight, apportionment of loss, damage, and overcharge claims among carriers party to the haul, collection of guaranteed charges, distribution of deficits arising from uncollectible freight charges, handling of damaged shipments, settlement of claims involving litigation, interline settlement after investigation and payment, and the settlement of amounts due by draft.

Claim Prevention

The huge annual loss through freight claims constitutes a problem which both carriers and shippers are seeking to solve. Out of every hundred dollars of gross revenue the carriers are paying out to compensate shippers for loss and damage an amount which has averaged \$1.72 during the past ten years, in addition to large sums for the maintenance of claim departments. These sums moreover do not cover the entire economic loss arising out of freight loss and damage. A repayment of money damages does not fully compensate shipper or consignee. The thing desired is the receipt of freight in good condition and in reasonable time. Payment of the claim does not deliver the goods for resale or consumption.

The rail carriers and the express companies, through their various associations, and the shippers, through the National Industrial Traffic League and other commercial organizations, have directed their attention toward the relief of this condition through the prevention of claims. Some claims are, of course, unavoidable, but very substantial results may be accomplished by coöperation between shippers and carriers in the following respects: (1) use of substantial containers; (2) avoidance of secondhand containers unless in good condition; (3) careful marking of packages; (4) obliteration of old marks; (5) care in loading and unloading; (6) proper preparation of perishables for shipment; (7) placing name and address of shipper and

consignee on inside of package; (8) use of sufficient blocking and dunnage; (9) exact description of article on bill of lading; (10) avoidance of rough handling of cars; (11) use of proper equipment; (12) more careful policing to prevent robbery; (13) greater care in billing; and (14) efficient tracing.

Claim Work in Industrial and Commercial Traffic Departments

In the chapters dealing with organization it was noted that while modes of organization differ so that claim

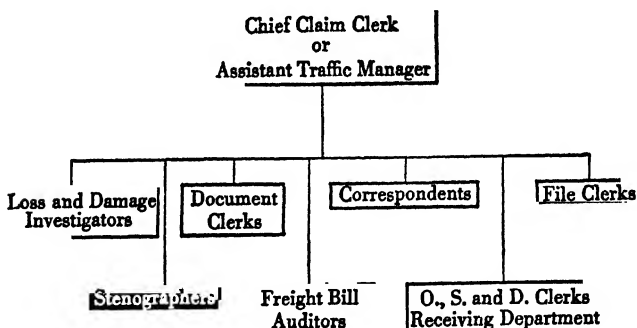


FIG. 50. TYPICAL CLAIM BUREAU ORGANIZATION

bureaus or desks may not be said to occupy positions of equal importance in all traffic departments, nevertheless, the importance of claim work is apparent, for few, if any, commercial or industrial departments are set up without ample provision being made for the preparation and presentation of claims.

Overcharge claims are frequently attended to by freight bill auditors attached to the staff of the rate bureau or desk. These men check the inbound billing received from the rail, water, express, and motor carriers, and verify such bills,

if possible, before payment. If errors are discovered after the bills have been paid, the incorrect bills with notations of the nature and extent of the overcharges are usually transmitted to the claim bureau for presentation against the carriers.

Loss and damage reports are received from the receiving department and from the facts contained in these reports loss and damage claims are prepared. Complete files of all pending claims are kept and followed closely so that none may be barred from suit due to the passage of time. This work calls for thorough familiarity with the law respecting the liability of carriers and with the procedure to be followed in collecting claims from various classes of carriers. The work is usually in charge of an assistant traffic manager or a responsible bureau chief assisted by the necessary staff of investigators, clerks, correspondents, and file clerks. A typical claim bureau organization is shown in Figure 50.

PART II

**ORGANIZATION AND
ADMINISTRATION**

CHAPTER XIII

TYPES OF INDUSTRIAL TRAFFIC DEPARTMENTS, ACCORDING TO SCOPE OF FUNCTIONS PERFORMED

Factors Determining the Type of Departmental Organization

Traffic departments, organized to supervise the traffic and transportation work of industrial establishments, differ in certain respects from the departments set up to handle the same matters for commercial houses. Within the general classification of industrial traffic departments are variations in plans of organization induced by a number of factors to be discussed presently.

The type of organization of the traffic department and the place of the traffic manager in the scheme of organization of the industry depend upon several factors. In the first place, the nature of the business shapes to a certain extent the general form of departmental organization. In the second place, the volume of business determines whether a large or a small traffic department organization is desirable. Thirdly, the nature of the tonnage handled influences the position of the traffic department. Obviously, a firm handling a large amount of less-than-carload freight requires an organization quite different from that of a concern handling little other than carload quantities of freight.

In the fourth place, the direction of the tonnage flow exerts an influence upon the structure of the traffic organization. If the tonnage flow is fairly well divided between inbound and outbound traffic, an organization varying

considerably from the departmental organization required to handle inbound tonnage only, will be necessary. A ship-building plant, for example, handling a large amount and variety of inbound tonnage, has practically no outbound traffic except scrap, refuse, refused shipments, and other relatively unimportant items. The finished products, steamships, are floated away from the plant by water under their own power.

In the fifth place, the scope of the work to be performed by the traffic department shapes its place in the organization. A department handling local transport service, internal switching facilities, shipping and receiving freight, as well as routing, rating, claims, tracing, and expediting must be placed and organized differently than a department that is designed to handle only a few of these functions.

A sixth factor influencing the position of the traffic manager in the business organization is the general organization policy of the corporation. Various types of organizations are favored by different corporations. Some prefer to organize a large number of small independently functioning departments headed by department specialists, with the allied departments drawn into groups supervised by administrative officials who are responsible to the executive head of the plant. Other corporations prefer large departments handling a variety of functions. All shades of preference in this respect can be illustrated.

Lastly, the traffic manager's position is often determined by the ability of the man himself. A technically trained executive with organizing ability and vision will establish himself in a position of importance and responsibility in an organization, while a less able man will be placed in a position of less responsibility and influence.

A large department, handling all of the standard functions previously discussed, is usually an independent organ-

ization, responsible directly to an executive head of the business. A smaller department, concerning itself with only a portion of the list of duties, is often attached as a subordinate department or bureau to a large department. Such small bureaus performing the routine work of checking freight bills, tracing cars, quoting rates and expediting freight movement, are found in many industrial establishments attached variously, to the sales, purchasing, or stores departments.

The trend of the times is apparently away from this latter type of traffic organization, performing clerical or at best semiclerical functions, toward the broader departmental organization, exercising broader powers of supervision over all the transportation affairs of the industry. The small clerical bureaus are giving way to the departmental organizations worthy of the name "traffic department" and the supervision of the department's activities is coming to be intrusted to men of broad gauge and technical training in traffic matters.

Few farseeing executives of industrial organizations are willing to intrust their traffic matters to others than men equipped not only to perform the routine work of traffic management but also fitted to consult with the management in determining the concern's supply and distribution policies. Each year witnesses the establishment of new traffic departments and the reorganization of small checking and tracing bureaus into full departments headed by transportation experts. This policy frees the traffic man from subordination to the sales manager, purchasing agent, storekeeper, or other department manager, and places the head of the traffic department on a parity with the heads of these allied departments. An executive officer of the corporation usually supervises the work of the departments concerned with supply and distribution, and the department managers are called into consultation with the

responsible executive to assist in the determination of sales and purchasing policies.

This plan of removing the traffic department from the domination of other departments has marked advantages. It enables the traffic department to do work more constructive and less clerical in nature, and it places the traffic manager in a position where his word in the council of the company is heard directly and not through the medium of the manager of another department. Sales and purchasing department managers are often not trained transportation men and hence may fail to appreciate the force of some of the suggestions and sometimes choose to ignore them. The traffic manager who heads an independent bureau, provided he has technical training and sound judgment, can place his ideas and suggestions directly before the management, and his success is more apt to be directly proportional to the value of his suggestions.

The Place of the Traffic Department in a Typical Industrial Organization

The bulk of the work of the traffic department has to do with the supply and distribution work of the industry. Hence, in the average industrial organization, the traffic manager is attached to that part of the organization having jurisdiction over work of this sort. In industries that are organized according to a plan of separation of the work of plant operation, supply and distribution, and office administration, the traffic manager is often attached to the staff of a manager in charge of supply and distribution. The purchasing agent, credit manager, advertising manager, and sales manager are likewise made subordinate to this official, whose duty it is to coördinate the work of the heads of these five principal supply and distribution departments. Meetings are held frequently and the views of the manager of each of these allied departments are ex-

pressed for the benefit of the whole group. This exchange of ideas has been found of great value in promoting a feeling of unity among the allied departments. A broader view of the part each department plays in the work of the industry is made possible by this method of organization. Variations of this plan may be observed in the organizations of a number of large industrial establishments.

Among smaller industrial concerns, there is no such division of the business organization into major functional groups. In such organizations, the traffic manager is found, usually, as a department head, reporting in some cases to the president of the concern and in other instances to a vice president or to the general manager.

Executive Control of Traffic Departments

There are several plans of organization within the field of industrial traffic management as to the control or supervision of the traffic department by higher executive or administrative officers. In a number of representative industries an administrative officer, a manager of supply and distribution, intervenes between the traffic manager and the general manager. This officer interprets the general policy of the corporation for the guidance of the traffic manager and the heads of allied departments and holds them responsible for the proper discharge of the work of their departments. The manager of production and the manager of administration function in a similar way in supervising the work of their organizations.

Another plan of organization places the traffic officer or officers directly subordinate to the president of the corporation. The three division freight agents of a typical steel-manufacturing company report directly to the president of the company in all matters except those solely concerning the divisions in which they have supervision over transportation affairs. The division operating managers of the

company have nominal supervision over these traffic men in their work within their respective districts. The traffic manager of a soap-manufacturing company reports directly to the president of that corporation. A large iron and steel plant and a bridge company are organized similarly.

Perhaps a more usual plan of organization is that in which the traffic manager reports to a vice president in charge of a group of departments. A nationally known explosive- and chemical-manufacturing corporation has a large traffic organization under a director of traffic and a traffic manager. The executive control of this department is exercised by the vice president in charge of purchases and stores. The history of this department and its supervision illustrates one of the factors which influence the organization of departments. The present vice president was formerly the director of sales and at the same time a traffic expert. As this man was promoted to a higher position in the organization, the traffic department was continued under his supervision because of his special qualifications.

The general traffic manager of an establishment manufacturing floor coverings, with plants in several cities in the eastern section of the United States, reports directly to the vice president in charge of production, as shown in Figure 51.

A number of industrial plants are organized with all departments except those handling corporate finances or other special phases of executive work under the supervision of a general manager. A large canning plant has a traffic department organized after such a plan. The general manager supervises the work of the traffic department which is headed by a traffic manager. Subordinate to the traffic manager is an assistant manager, a rate and a tariff clerk, a claim clerk, a clerk handling tracing and correspondence work, and two stenographers and typists. The

TYPES OF INDUSTRIAL DEPARTMENTS 303

traffic work in connection with warehousing and storage as well as plant switching service is also supervised by the traffic manager.

Smaller so-called traffic departments are often found as subordinate bureaus attached variously to sales, purchasing, production or other major departments in industrial organizations. These "one man departments," which as a rule handle only a few of the real functions of traffic man-

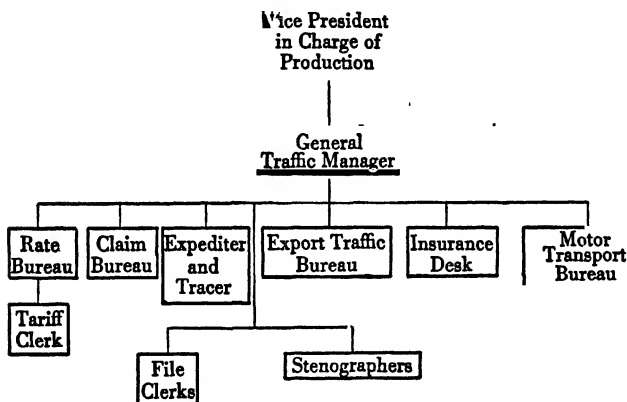


FIG. 51. TYPICAL TRAFFIC DEPARTMENT ORGANIZATION UNDER EXECUTIVE CONTROL

agement, can be considered only as departments in embryo. From nuclei such as these many large departments have grown, but they can hardly be considered as traffic departments in the sense that the term is ordinarily used.

It is difficult and profitless to criticize the forms of executive control of traffic departments found in various industries. Conditions vary in different industrial establishments and so give rise to various forms of organization. None of the forms of organization referred to here may be regarded as a model for all departments because the varia-

tions in conditions make absolute uniformity impossible. The test of the efficiency of any plan of organization and control is the functioning of the department as a part of the general organization without friction with other departments. If the department achieves the purposes for which it is organized, without duplicating the work of other departments or leaving necessary work undone, the mode of organization may be regarded as successful. If, however, these results are not obtained a change in policy as to organization and control is advisable. The executive control of traffic departments varies so that the only generalization possible is that the control is usually vested by the managements of enterprises in those fitted, by special training or inclination, to handle the difficult task of supervising the transportation and traffic interests of the industry and capable of helping in the formulation of a transportation policy to protect the best interests of the establishment.

Typical Industrial Traffic Organizations

Although fashions vary considerably in industrial traffic departments, there are four outstanding types of departmental organizations into which all industrial departments may be more or less accurately fitted. All existing departments which have come to the notice of the present writer have certain earmarks which bring out a resemblance to one or another of these general types. Although no two departmental organization plans may be precisely alike, yet the points in common are more numerous and noteworthy than the differences. So it is, then, that the four characteristic organizations outlined below may be said to be typical of the classes of traffic departments they represent.

The "Nonphysical" Traffic Department

Proceeding from the simple to the more complex, the first type of industrial traffic department is the organiza-

tion set up to handle all, or substantially all, of the important "nonphysical" traffic functions but none of the functions relating to the actual shipping or receiving of freight, nor the handling of local motor transportation to and from the plant, nor the management of local intraplant switching services.

The typical department of this sort is an independent department under the direction of a traffic manager. This administrative department head reports in some cases to the president, vice president, director, or other executive officer of the corporation, and in other instances to a manager of supply or distribution, a general manager in charge of a group of departments, or other high administrative officer. The traffic manager is responsible for the results accomplished by the department, for the maintenance of discipline, the fitting of the men to the work so as to obtain efficient performance of the work of the department, and the preparation of traffic matters for presentation before committees of the carriers and regulatory commissions. Rate quotations are obtained from transportation companies as needed and the information is disseminated to the sales, purchasing, and other departments requiring such data. Rate tabulations are prepared for use of the department. Freight bills are checked, claims are presented for loss, damage, and overcharge, settlements are made with the carriers for freight charges, arrangements are made for prepayment of outbound shipments, overdue shipments are traced, urgently needed shipments are expedited, and routes selected over which freight is to travel.

Records are kept of inbound and outbound carload and less-than-carload shipments, if the industry has its own siding or uses public team tracks, and demurrage bills are checked against these records.

Tariffs are obtained from the carriers or associations

publishing them and arrangements are made to house properly the files of tariffs.

The routine clerical and stenographic work of such departments is usually performed under the direct supervision of a chief clerk. In some instances the assistant traffic manager acts as the deputy of the traffic manager in

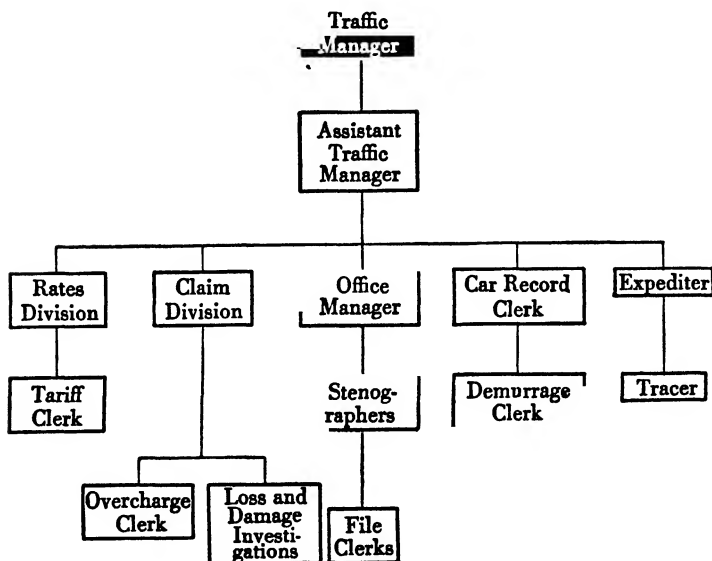


FIG. 52. TYPICAL ORGANIZATION OF THE "NONPHYSICAL" TYPE OF TRAFFIC DEPARTMENT

his absence and performs also the work of supervising the routine clerical work of the department. If such is the case the position of chief clerk is dispensed with. Other organizations have no stenographers attached directly to the department but use staff stenographers who are allotted to the traffic department as their services are required but who report as members of a general stenographic department. This plan has the advantage that the stenographic

force of the entire establishment is kept uniformly busy, but has certain disadvantages in traffic work as in other technical work because of the difficulty experienced by stenographers unless they are familiar with traffic terminology.

A typical organization illustrating this type is outlined in Figure 52. This chart may be regarded as a composite picture of a number of industrial traffic departments to be found in industrial establishments throughout the United States.

The Second Type of Industrial Traffic Department

A second and more complex form of departmental organization includes, in addition to the personnel necessary for the performance of the functions attended to by traffic departments of the first type, additional employees to handle the actual work of shipping and receiving freight. The clerical staff of the department, subordinate to the traffic manager, attends to the rate, tariff, claim, expediting, tracing, routing, statistical, and financial duties of the department very much as that work is performed in the typical department described previously. A foreman in charge of the shipping room, or subdepartment, supervises the preparation and forwarding of outbound freight shipments. Instructions as to methods of packing goods for certain customers or for shipment into certain sections of the country are often specified in detail by the traffic manager or one of his staff. Packing specifications for the preparation of shipments so as to obtain the lowest rates of freight consistent with the safety of the goods and the containers to be used are usually prepared for the guidance of the shipping room by members of the traffic staff. Loading directions for the stowing of carload shipments are laid down so that all the goods possible are got into each car with the least amount of dunnage and bracing necessary

to protect the freight. Routing guides showing the preferred routes for carload and less-than-carload shipments to certain customers or general routes to be used to certain points are usually prepared for the use of the shipping men by the traffic staff.

The shipping foreman, guided by these and other instructions of the traffic manager, supervises the loading and stowage of carload shipments, sees that necessary cars of proper size and capacity are ordered, checks contents of cars against orders to verify quantity and quality, sees that bills of lading are correctly prepared and executed by the agents of the initial carriers, checks the condition of outbound shipments, supervises the packing, marking, weighing, and inspection of outbound shipments, and is responsible in general for the performance of all of the duties in connection with starting goods properly on their journeys.

Subordinate to the shipping room foreman is a staff of clerical workers and laborers who attend to the details of the work outlined above. The checkers or tallymen verify the contents of packages and of cars and check contents of shipments against the orders and shipping documents. The bill of lading clerk makes out the bills of lading and arranges for execution of the documents by the agents of the carriers. The weighers, markers, packers, and loaders perform the routine work indicated by their designations under the supervision of a foreman in larger departments or of the shipper or his deputy in smaller organizations. The car clerk arranges for the placement and release of cars with the carriers and is responsible for obtaining the equipment of the kind, size, and capacity required for the shipment of carload freight and arranging for trap cars for less-than-carload freight. Records of car initials and numbers and time of placement and release are kept to verify demurrage records.

The shipping organization in traffic departments of the type under discussion has no jurisdiction over local transportation facilities. Shipments, when ready, are turned over to motor trucks or teams of the establishment which are under the supervision of another department, or given to outside trucking companies hauling goods for the concern. In either event jurisdiction and responsibility terminate when goods are surrendered to the truckmen.

The receiving room organization of departments of this type is similar in many respects to the shipping organization. A foreman in charge of the receiving room or sub-department is accountable to the traffic manager for the successful performance of the work of receiving inbound shipments. Arrival notices from the carriers are transmitted to the receiving department which arranges for the trucks or teams of the industry or of the hauling company employed by the industry to pick up the less-than-carload shipments at the railroad freight depots or steamship docks. The receiving department in organizations of this type has no direct supervisory powers over the teams or trucks. Instructions are issued by the traffic manager and passed along to the truckmen by the receiving room foreman, governing the acceptance of short and damaged shipments and cautioning against signing of "clear" delivery receipts unless the truckmen are convinced the goods are in perfect condition. Less-than-carload shipments from the local freight stations or near-by transfers in ferry cars are unloaded from the cars and checked against freight billing and purchase orders by the receiving room organization. Shipments not covered by billing, or those of which parts are missing, and damaged shipments are reported by the receiving room to the claim men of the traffic department so that appropriate claims may be prepared and presented to the carriers.

Specifications are often issued by the traffic department

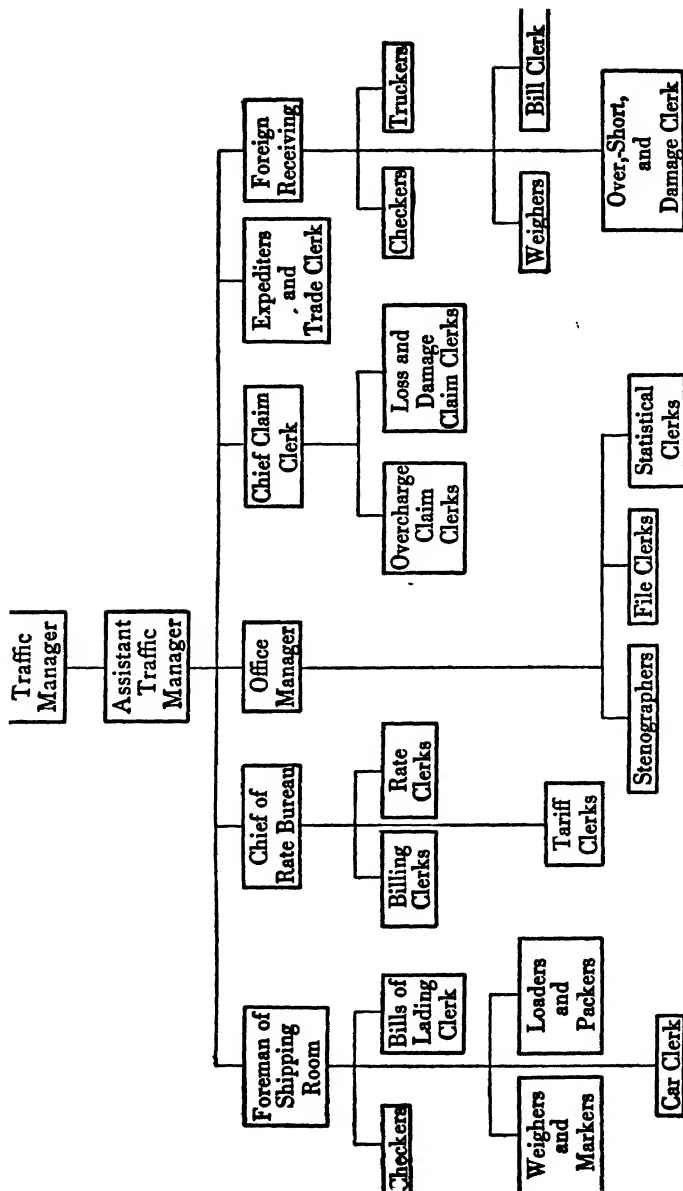


FIG. 53. TYPICAL ORGANIZATION OF A TRAFFIC DEPARTMENT HANDLING SHIPPING AND RECEIVING

showing the preferred method of packing for freight. Instructions as to packing are issued to suppliers in many cases at the time the purchase orders for the material are placed or the purchase orders are supplemented by special shipping instructions. Variations from such instructions are reported to the traffic manager by the receiving room organization so that the suppliers deviating from the instructions may be held responsible for higher freight charges or damages to goods caused by failure to observe the shipping instructions.

Weights of incoming shipments are verified by reweighing when the circumstances warrant. Variations from the billed weights are noted and reported to the traffic department. This service is customarily performed in connection with both carload and less-than-carload shipments.

Subordinate to the foreman of the receiving room, in typical organizations of this class, are checkers, weighers, and truckers to handle the routine phases of the work outlined. A billing clerk attends to arrival notices, receives freight bills covering the freight, and handles inbound-car records for use in checking demurrage bills. The freight bills are transmitted to the traffic department for auditing and the records of time of placement and release of cars are turned over to the clerks in charge of demurrage for auditing. The over, short, and damage clerk reports all exceptions in condition of freight to the attention of the claim men of the traffic department. A typical organization chart of an industrial traffic department of this class is shown in Figure 53.

Traffic Organizations of the Third Type

A third form of organization, typical of departments in larger industrial establishments, is more comprehensive in that it includes personnel sufficient to handle all functions connected with rates, routes, tariffs, claims, expediting,

tracing, statistics, shipping, receiving, and similar matters, and in addition, a local motor transportation organization.

The motor trucks or teams owned by the industrial establishment are operated under the direct supervision of a superintendent of local transportation or a subdepartment head with similar title and authority. This man's work includes the supervision of the company garage with the repair men and other employees who are necessary to care for the cars, as well as the control of the motor truck operators.

Instructions are usually issued by the traffic manager governing the calling for and delivery of freight and hauling between railroad and steamship depots and the plant. Delivery receipts are signed by the chauffeurs acting as deputies of the traffic manager and these men are responsible to the latter for the condition of the freight signed for. Exceptions are reported immediately to the traffic department's claim clerks so that the responsibility for loss or damage may be located and the proper claims filed. Local short-distance motor truck transportation is also attended to by the establishments' own trucks which are operated under the supervision of the traffic manager in organizations of this class. In cases where quicker service is required or where motor truck service may be more desirable than rail or water transportation and not prohibitively expensive, motor trucks may be used for comparatively long distance hauls. The superintendent of local transportation is required in many cases to keep operating-cost figures and these data give the traffic department reliable bases for comparing rail, water, express, and motor transportation costs. Decisions as to routes are based upon such comparisons.¹

¹ See P. E. White, *Motor Transportation of Merchandise and Passengers* (McGraw-Hill, New York, 1923), Chap. xii, p. 204.

The daily work of the industry requiring trucks is usually laid out in the local transportation office and the trucks routed so as to perform the work most efficiently.

The detail work of this subdepartment is handled by a corps of clerical workers, chauffeurs, garage men, and mechanics reporting to the superintendent who in turn reports to the traffic manager.

The close connection between traffic work, shipping, receiving, and local transportation makes this closely knit type of organization preferred by many industrial establishments. The outline chart of such an organization, shown in Figure 54, may be regarded as typical.

The "Complete" Industrial Traffic Department

The fourth type of industrial traffic department may well be called "the complete industrial traffic department." This class of department is organized so that all the functions performed in the three types of departments previously described, may be performed and the work of the yard locomotives and crews engaged in intraplant switching service supervised. Only industrial establishments having rails within the plant need such an organization but a large number of industries in the United States are so extensive as to require considerable network of private tracks within the plant as well as locomotives and private cars to handle the switching service within the limits of the plant. In charge of the transportation service inside the plant gates, there is usually a superintendent of plant transportation or a yardmaster. Incoming cars are turned over to the plant crews at the designated interchange track and are placed at the unloading points by the plant's own power and crews. Outbound cars in like manner are hauled from the loading point to the interchange track by the plant's forces and turned over to the carrier for road movement. This service is done and the necessary records

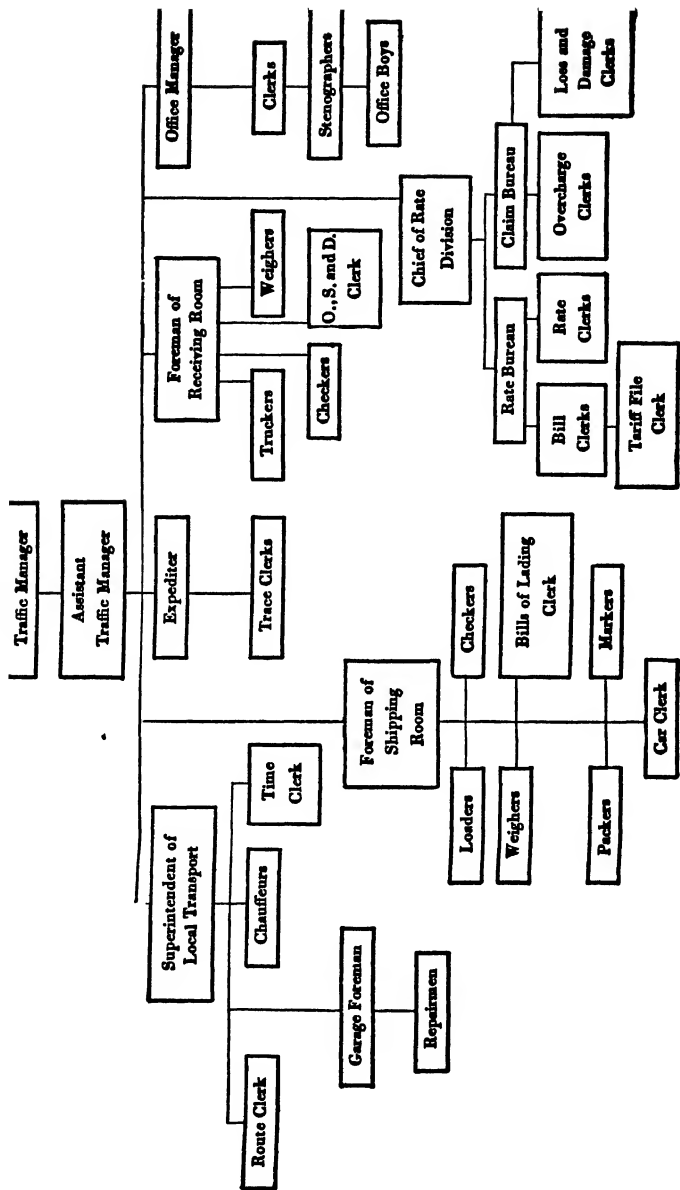


FIG. 54. TYPICAL TRAFFIC DEPARTMENT ORGANIZATION TO INCLUDE LOCAL TRANSPORTATION

are kept by the subordinate staff of the superintendent of transportation.

The railroads in many instances pay allowances to the industrial establishments for the performance of this initial and delivery switching service. In some cases, the industrial roads serve or hold themselves ready to serve other industries and are rated as common-carrier switching roads and as such divide the through-transportation rates with the line carriers. In other cases, the industrial organization performs the service for the sole benefit of the one establishment and receives allowances of stated amounts per car for performing for the carriers delivery and initial switching services which the rail lines would ordinarily be called upon to perform as part of the transportation service.

Many industrial establishments have superintendents of plant transportation and in a number of instances there is no direct connection between this department head and the traffic manager except that they coöperate in the performance of complementary phases of the work needed to be done to assure efficient transportation service. A large number of establishments, on the other hand, have organizations in which the superintendent of transportation is a member of the general traffic department. In organizations of this type, the superintendent ranks as an important subdependent head, subordinate to the traffic manager. The complete movement of inbound and outbound freight is governed by a traffic department and the transportation interests of the concern are handled by a centralized authority although the specialized technical subdivisions of the work are supervised by men especially trained in rates, claims, expediting, and tracing work, motor transportation, shipping, receiving, and plant transportation. The work of specialists is supervised by a traffic executive. This plan has found great favor among the large industrial corpora-

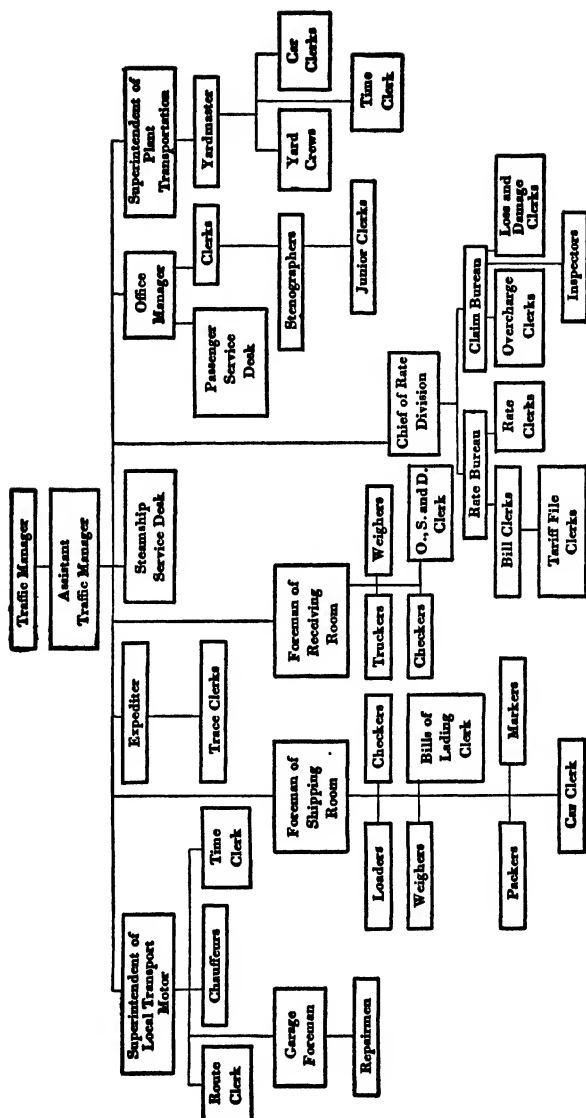


FIG. 55. TYPICAL ORGANIZATION OF THE "COMPLETE" INDUSTRIAL TRAFFIC DEPARTMENT

tions of the United States, although it is not found in all such organizations. The policies of concerns, the ability of the man occupying the position of traffic manager and the preferences of high industrial executives and other factors account for the variations that are to be found.

Many large organizations of this class have subdepartments handling steamship traffic work, passenger service work, or other special bureaus as parts of the traffic department. These special bureaus are also in charge of specialists and are found in various establishments according to the special needs of the industry. Two such bureaus are to be found in the typical organization chart accompanying this discussion (Fig. 55), for the need for special steamship and passenger information is so widespread among larger establishments that the absence of these two service desks is the exception rather than the rule in complete organizations. The work may be performed by men in other bureaus as part-time work, but it is a part of the work of the typical "complete industrial traffic department."

The so-called "complete traffic department" is not a static affair, nor for that matter are any of the other organizations referred to as less complete typical organizations. Industries are constantly adding functions to the work of the traffic department, as is the case indeed with other departments. Promotions of former subordinates to subdepartment heads may change the detailed scheme of organization but the general plan changes but little. Departments are for the most part gradually developing into more and more complete organizations, taking on new functions and increasing in numbers of employees as the industry expands and the technique of transportation develops. The industrial traffic manager is coming to be more fully appreciated as an important cog in the industrial machinery with each passing year. As industrial executives become convinced of the value of specialized service of the

character offered by the new school of traffic men, skilled in transportation and familiar with industrial problems, more and more duties are added to those performed by such men and the traffic manager is able to demonstrate the worth of his services to industry. The horizon of the industrial traffic manager is growing as new fields of service are added each year.²

² H. A. Palmer, editor, *Traffic World*, editorial, "Coöperation in Transportation," Vol. 35, No. 4.

CHAPTER XIV

TYPICAL COMMERCIAL TRAFFIC DEPARTMENTS

Definition of Term Commercial Traffic Department

Commercial traffic departments include a variety of traffic organizations performing, for the most part, all or substantially all of the "nonphysical" traffic functions (routing, rating, claim preparation, reconsignment, diversion, and the like) that are performed in industrial traffic departments, but none of the "physical" traffic functions (shipping, receiving, local transportation, or plant transportation). They are distinguished from industrial traffic departments in that they function for groups of industries, for commercial interests, or for communities, rather than for individual concerns. Many kinds of traffic organizations are included within this definition. In addition to the traffic departments of trade associations, chambers of commerce, and civic traffic development bureaus, are those attached to other commercial and civic bodies that usually differ from the above organizations in name only.¹

Trade Association Traffic Departments

A distinctive type of commercial organization is found in the trade association, organized to promote the interests of member concerns that are engaged in a single line of business activity. The Association of Trade Association Executives defines a trade association as "an organization of producers and distributors of a commodity or service

¹See S. P. Haynes, *Community Traffic Management* (La Salle Press, Chicago, 1919), p. 3.

upon a mutual basis for the purpose of promoting the business of its branch of industry or commerce and improving its service to the public.”² Among the methods now in use for accomplishing this end are the compilation and distribution of information, the establishment of trade standards, and the handling of coöperative problems common to the production and distribution of the commodity or service with which they are concerned.

These associations differ from boards of trade or chambers of commerce, which embrace all industrial and commercial concerns in a city, district, state, or nation, in that the members represent the establishments that are engaged in one line or business or in a single branch of economic activity. The National Paint, Oil and Varnish Association, for example, is composed, as the name indicates, of industries engaged in the production and distribution of paints and allied articles. The Casket Manufacturers' Association is a national association of concerns engaged in this line of business. The Michigan Manufacturers' Association is a type of trade organization limited to concerns within the state of Michigan, but broader than the other organizations in that manufacturers of a number of commodities are represented, although all are manufacturers.

Trade associations differ from organizations of traffic managers such as the National Industrial Traffic League or associations of commercial traffic managers in that the trade associations are composed of the industries, while organizations of traffic managers are technical associations of traffic specialists, similar in many respects to societies of lawyers, accountants, physicians, engineers, credit men, and advertising specialists. Membership in trade associations is based on the business, while membership in the traffic managers' associations is based upon technical or profes-

² Annual Report, Association of Trade Association Executives, December, 1922.

sional qualifications, as well as upon the business connections of the members. These organizations are discussed more fully hereafter.³

Trade associations are to be found in many lines of business activity and include national, sectional, state, and local organizations, representing manufacturing industries, wholesalers and jobbers, producers of agricultural, forest, mineral, animal and other products, as well as retailers. In 1924 more than 1,800 associations were in existence, an increase of more than a thousand in the last ten years.⁴ Not only has there been a considerable increase in numbers during this period, but the following list of functions performed indicates the wide scope of association activity. Among the functions performed might be mentioned the compilation and distribution of statistics of the trade and collection of data and assistance in the following phases of industrial and commercial problems:

1. The adjustment of trade disputes
2. The promotion of industrial research
3. Personnel and employment problems
4. Public relations
5. Credit and collections
6. Taxation
7. Government regulation
8. Insurance and transportation problems

Activity among trade associations in the transportation field takes one of two forms. A number of associations have traffic committees, composed of representatives of the member industries or commercial houses, which analyze the transportation problems of the trade in a general way. These committees are unpaid and act in advisory capacities to the directors or executive heads of the organizations and

³ See Chap. xviii.

⁴ Annual Report, Association of Trade Association Executives, 1924.

the findings are communicated to the membership for the guidance of the activities of the individual concerns.

Other associations have organized permanent traffic bureaus in the charge of salaried traffic managers or transportation commissioners, who devote their entire time to the traffic and transportation affairs of the associations. In their work they may be assisted by several subordinates or may attend to the work with only stenographic help. The duties of traffic managers of associations organized along such lines include a great variety, among which may be listed :

1. The analysis of traffic conditions affecting the trade
2. The protection of the commodities dealt in by members against rate and service discriminations
3. Classification and rate studies
4. Interpretation of classification rules and tariff provisions for the benefit of members
5. Preparation of packing specifications
6. Preparation of standard billing descriptions and instructions
7. Preparation of freight-rate guides
8. Dissemination of important transportation information
9. Interpretation of decisions of courts and regulatory bodies which concern the trade
10. Arranging for changes in classification and rate adjustments
11. Preparation of cases before courts and commissions so as to protect general service complaints
12. Negotiations with carriers to obtain relief from car shortage and to adjust other service complaints
13. Representation of the traffic problems of the trade to the carriers so that the latter may understand the point of view of that particular class of users of transportation services

The traffic manager of the trade association is the traffic spokesman of the trade and is usually recognized as such by the traffic officers of the carriers.

In addition to serving the members of the association as

a whole, a number of trade-association traffic bureaus attend to certain phases of traffic work for individual members. Member establishments, which have no traffic departments of their own, may call upon the traffic department of the association to trace shipments, interpret tariffs and classifications, audit freight bills, quote rates, prepare and present overcharge, loss, and damage claims, obtain cars, trace, expedite, and route freight. These additional services may be charged for in addition to the membership fee, which presupposes in most instances traffic service of a general character only, or may be included in the membership fee, which is made sufficiently high to cover the entire expenses of the bureau, including these special services.

A large number of trade associations are represented in the membership of the National Industrial Traffic League, the nation-wide organization of traffic managers. This participation in the affairs of the League indicates the interest displayed by trade associations in traffic matters.

Typical Trade-Association Traffic Organizations

The typical traffic organization of a trade association is composed of a traffic manager who is usually assisted by a rate man, a tracing clerk, a claim clerk, and a car service clerk, as well as stenographers and file clerks to handle the detailed work of the bureau. Few associations have a separate man to handle each of these tasks; one subordinate often attends to several phases of the work.

The traffic manager usually reports to a transportation committee, composed of members, which formulates the general traffic policy of the association and directs the activities of the traffic bureau. The executive secretary of the association, usually a full-time, salaried official, supervises the work of the traffic manager as a deputy of the president of the association. All bureau chiefs of the

association are usually responsible to the general or executive secretary, whose duty it is to see that the work of the various bureaus and the committee is properly coördinated. In some instances general secretaries are also the traffic managers, in which cases they function as dual officials. A typical functional diagram of trade-association traffic departments is shown in Figure 56.

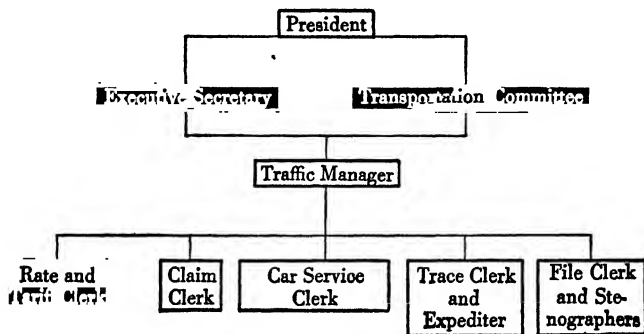


FIG. 56. TYPICAL TRADE-ASSOCIATION TRAFFIC ORGANIZATION

Traffic Departments in Chambers of Commerce

Chambers of commerce, boards of trade, commercial clubs of one kind or another are in existence in the majority of American cities of great commercial importance and in many smaller towns. In addition to these local community organizations there are several state chambers of commerce such, for example, as the Pennsylvania State Chamber of Commerce, as well as a national chamber, the Chamber of Commerce of the United States. These associations are composed of business men and others interested in the commercial and industrial progress of the cities, states, or nation, and are supported by the contributions of the members through the payment of membership fees.

These organizations differ from trade associations in that all branches of industry and commercial activity are represented, including manufacturers, jobbers, wholesalers, and dealers, as well as railroads, express companies, steamship lines, and a host of other businesses.

The purpose of community chambers of commerce is stated by the general secretary of the chamber of a representative city to be

the improvement of the commercial, civic and industrial conditions of the community in which it is located, the upbuilding of its trade and commerce, and the creation of a widespread knowledge of its resources and its manufacturing importance, as well as the advantages of its geographical location and climatic excellence as a desirable place of residence.

The chamber should, at all times, present a united front and a strong determination toward a common purpose; the improvement in every way of the city in which it is located.*

With these objects in mind, the organization is established. Most chambers are presided over by a president, a nonsalaried executive, selected from among the membership by ballot. A prominent business man is usually elected to this position. A board of directors, varying in numbers, is selected, as well as several vice presidents and a treasurer. These officers are nearly always prominent men who devote a portion of their time to the work without remuneration.

A general secretary, or an executive secretary, is appointed, usually by the president with the approval of the board of directors. This official is, in the larger chambers, a full-time, salaried employee in charge of the permanent staff of the organization. A number of standing committees are appointed by the president to consider various phases of the work of the chamber. Members of such com-

* N. B. Kelly, General Secretary, Philadelphia Chamber of Commerce, Annual Report, 1918, p. 13.

mittees are usually chosen because of their knowledge of and interest in the work of the particular committee to which they are assigned and because of their ability and willingness to devote a portion of their time to the work. Each committee is presided over by a chairman, assisted often by a vice chairman, who are appointed for the larger committees. Reports are made and responsibility is assumed by the committee for the work of the bureau of the organization that is devoted to the subject.

Bureaus, organized as permanent departments of the chamber, gather information, make investigations, and advise the membership in connection with special problems. Each bureau is under the direct supervision of a salaried member of the staff of the chamber, selected because of his technical training and administrative ability. The bureau chiefs are responsible jointly to the general secretary and to the chairman of the committees supervising the general work of the bureau.

The size and type of the organization varies in different chambers, depending upon the size of the community served, the number of members, the location of the community, the nature of the industries, and the special problems of the community. Smaller, less important chambers of commerce have neither the need nor funds to employ large permanent staffs, hence the work is less formal and is performed by committees of volunteers. In the larger chambers, however, large organizations with full-time employees are devoted to problems of membership, finance, publicity, transportation, and other fields.

The Philadelphia Chamber of Commerce, in 1924, had twenty-six such standing committees, as follows:

Executive Committee

Advisory Committee of the Membership Council

Agricultural Committee

Arbitration Committee

Banking and Currency Committee
 Charities and Welfare Committee
 Conventions and Exhibitions Committee
 Delaware River Bridge Committee
 Educational Committee
 Entertainment Committee
 Finance Committee
 Fire Prevention and Insurance Committee
 Foreign Trade Committee
 Good Roads Committee
 Harbor and Navigation Committee
 Industrial Committee
 Legislative Committee
 Membership Committee
 Members' Council
 Municipal Affairs Committee
 Taxation and Postal Affairs Committee
 Publicity Committee
 Public Utilities Committee
 Retail Merchant Committee
 Trade Expansion Committee
 Transportation Committee*

Eight of the committees listed above are assisted in their work by bureaus under salaried chiefs and with clerical staffs. These bureaus are organized to handle problems pertaining to:

Charities and Welfare
 Membership
 Retail Merchants' Credit
 Conventions and Exhibitions
 Industry
 Publicity
 Traffic*

A diagram of the organization of a typical chamber of commerce illustrates the coördination of the work of the various official and staff members (Fig. 57).

* Annual Report, 1924, Philadelphia Chamber of Commerce.

A survey of the organization and its functions is necessary to an appreciation of the transportation services performed by chambers of commerce, and to show the relationship of the transportation committee and bureau to the rest of the officials and committees of the chamber. The duties of the transportation committee, in most organizations, include the

study of all transportation problems affecting the community as a whole and protection of shippers and consignees of the community against rate discriminations, inadequate service, and prejudices against the community caused by the application of unfair rules or practices by the carriers.*

The data necessary for the accomplishment of the purposes of the committee are collected and compiled by the traffic bureau, and the technical information and advice are supplied by the traffic manager and the technical staff of the bureau.

In addition to these general duties of the traffic staff, a number of other functions are performed in representative chambers-of-commerce traffic departments or bureaus:

1. Assistance is given members in the preparation and collection of loss, damage, and overcharge claims against the carriers.
2. Information is disseminated regarding proposed changes in rates or classifications affecting the interests of shippers.
3. Rate quotations are made to interested shippers.
4. Shipments are traced and deliveries expedited.
5. General shipping information is disseminated to members.
6. Embargo notices are distributed among members shipping to embargoed points.
7. Special through package-car and fast freight services are brought to the attention of shippers.
8. Shippers are assisted in selecting routes over rail or water lines, or combinations of both.

* N. B. Kelly, General Secretary, Philadelphia Chamber of Commerce. *The Organisation of a Chamber of Commerce* (Lafayette Institute Press, Philadelphia, 1920), p. 16.

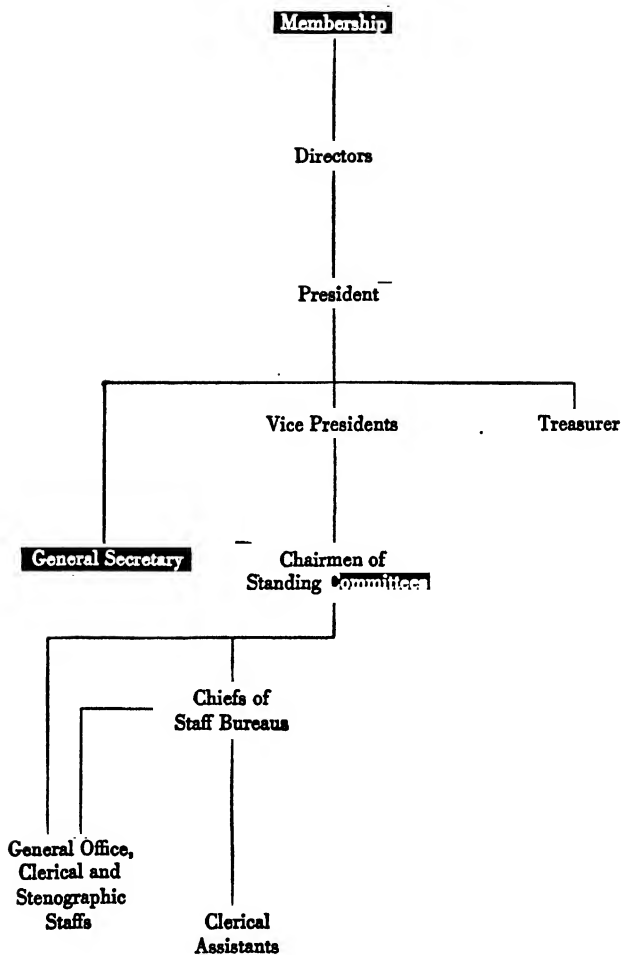


FIG. 57. TYPICAL ORGANIZATION OF A CHAMBER OF COMMERCE

9. Members are assisted in obtaining passenger rate and service information.

10. Members are notified of new water, highway, or rail services available.

11. New lines are sought to be brought to the community, if needed to improve the service.

12. Switching service arrangements are sought for the benefit of members.

13. Surveys and tonnage statistical data are prepared.

14. Parcel-post and express rates and service information are obtained and distributed.

15. Conditions at local freight stations are sought to be improved, when necessary, so as to obtain efficient delivery and shipping service.

16. Rate adjustments of benefit to the community are sought by negotiations with the carriers or by appeals to state or Federal commissions.

17. Freight bills and demurrage statements are sometimes audited for members. Most bureaus do not make a practice of auditing all freight bills of the members of the chamber. Many member concerns have their own traffic departments to handle this and other features of their own transportation work, calling upon the commissioner of transportation or traffic manager of the chamber of commerce only for assistance in special problems. Other concerns, without the benefit of expert traffic service, call upon the chamber's traffic department for regular service of a routine character.

Three plans are followed by chambers of commerce in providing this service. One plan is for the chamber to handle only the general work of the membership at large and accommodate individual members by performing special services at infrequent intervals without extra charge. A second arrangement is for the bureau to be equipped to handle a considerable amount of detail work for individuals at their request at no extra expense to the latter, except for necessary long-distance telephone calls and telegraph messages. The third plan offers the services of the transportation bureau to members without traffic departments of

their own, in connection with all traffic matters, including the auditing of freight bills, routing, tracing, expediting, and claim preparation. The bureau becomes, in effect, the traffic department of each member. Extra charges are made for this service in addition to the regular membership fee. Bureaus equipped to perform such service are more like traffic service bureaus, discussed hereafter, than typical chamber-of-commerce traffic or transportation bureaus.⁹

Most common are the bureaus of the first type which devote most of their attention to the protection and development of the traffic and transportation interests of the community. In charge of such bureaus there is usually a traffic manager or a transportation commissioner, the title being different in various organizations although the duties are substantially the same. Assisting the head of the bureau is often an assistant traffic manager or commissioner, or an assistant to that staff officer. A larger or smaller complement of rate, tariff, claim, and service clerks is found, varying in number with the volume of work and the range of activities performed in the bureau. The stenographic and detailed clerical work of the bureau is attended to in most chambers by the general clerical and stenographic staff which forms part of the general secretary's office. Staff stenographers usually take the dictation and attend to the correspondence work of each bureau of the chamber, and staff file clerks have charge of the general files. Bureau files are in some cases kept by the traffic bureau and attended to by one of the bureau chief's subordinates.

Tariff files, varying in size with the amount of rate work performed, are maintained by many bureaus and are placed in charge of a tariff file clerk, or the rate clerk. Rate clerks attend to the rate quotation work, the compilation of

⁹ See Chap. xvi.

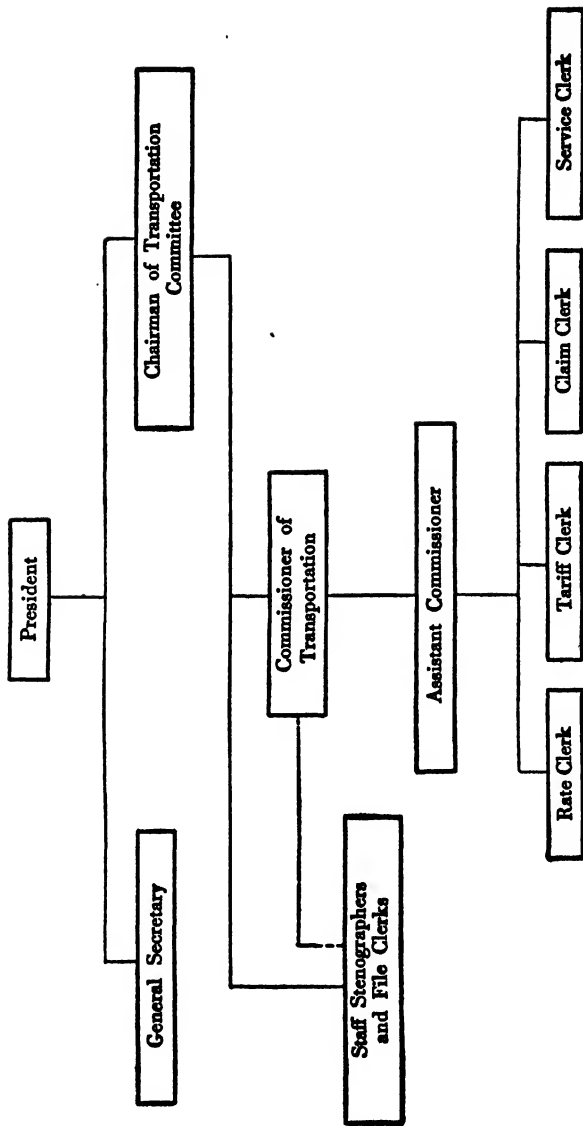


Fig. 58. ORGANIZATION OF A TYPICAL CHAMBER-OF-COMMERCE TRAFFIC BUREAU

statistics, and other similar tasks, while claim clerks and service clerks attend to claims, car service, tracing, expediting, and other detailed assignments, under the direction of the traffic bureau chief.

Many chambers of commerce have organizations that perform all of the functions indicated in the diagram shown in Figure 58, but without the subordinate personnel outlined here. The rate, tariff, claim, and service work may be attended to by the bureau chief and his assistant with no other help save that rendered by the stenographers and file clerks of the staff. Whether the work is performed by one or several individuals in different organizations, the functions indicated are typical of those performed in hundreds of chambers of commerce, boards of trade, commercial exchanges or clubs, throughout the United States.

Civic Traffic Development Bureaus

Rivalry is very intense between port cities that are striving for export and coastwise water-borne traffic, and the general industrial and commercial competition of these and other cities is likewise very keen. New York, Boston, Baltimore, Philadelphia, and Norfolk compete with one another as rival North Atlantic ports; similarly, Charleston, Savannah, and Jacksonville compete for business of the South Atlantic ports. Ports along the Gulf and Pacific Coasts, in like manner, compete with one another and each group of ports strives against each other group. The inland industrial and commercial centers seek to attract traffic through their cities to develop the business and to pave the way for greater achievement.

Chambers of commerce and similar commercial organizations do much toward "selling" the cities to the shipping public. Until recently most of this traffic, industrial, and commercial promotion work was left to the hands of such organizations.

Recently, however, a number of special traffic development bureaus have been created to boom the cities establishing the bureaus. Among others, the Port of Philadelphia Ocean Traffic Bureau was organized in 1922 to encourage the movement of coastwise and foreign ocean traffic via Philadelphia. The leading commercial bodies, including the Board of Trade, the Bourse, the Chamber of Commerce, the Commercial Exchange, the Department of Wharves, Docks and Ferries of the city of Philadelphia, the Grocers' and Exporters' Exchange, the Lumberman's Exchange, the Maritime Exchange and the Real Estate Board, joined in creating this new organization. The four last-named local trade associations were the founder organizations. All these coöperated through the new bureau in stimulating the shipment of imports and exports as well as coastwise business through the local port.

The organization consists of the leading commercial organizations as well as a number of business houses and others interested in the development of the port. A board of directors, an executive committee, and a secretary comprise the executive officers. A manager and a number of staff assistants attend to the operation of the bureau. An assistant manager is second in charge of the organization, several solicitors travel the territory from Rochester, New York, on the north, to Louisville, Kentucky, on the south, to Chicago, Illinois, on the west, and eastward as far as the ocean, pointing out to industrial business concerns and inland commercial associations the advantages offered by the port of Philadelphia. A chief clerk and several assistants attend to rate and service matters and a clerical and stenographic staff take care of the correspondence and file work.

A fortnightly publication, *Overseas and Coastwise Sailings*, is distributed among shippers and consignees of import, export, and coastwise freight throughout the United

States and among United States consuls in important ports and shipping centers abroad.

Among the chief results claimed for the activities of the bureau, the following are typical:

An increase has been made in the gross tonnage of shipping arriving and departing from the port.

A notable increase has been made in cargo tonnage entered and cleared of a number of commodities.

A considerable volume of new cargo tonnage never handled at the port before has been obtained.

Service was inaugurated to many ports of the world, and existing service improved.

Moving pictures and other means were used to give the port publicity.

Foreign trade inquiries received by the bureau were placed with firms interested in the line of trade.

Increased grain handling facilities were provided for port.

The bureau represented Philadelphia's interests at transportation meetings and conventions.

Complaints arising in the conduct of general shipping business were disposed of through the mediation of the bureau.

Railroad and ocean rates, services, practices and rules were scrutinized by the bureau to avoid discriminations and abuses against shippers using the port.

The bureau lends its aid in representing Philadelphia in cases before the Interstate Commerce Commission and other regulatory bodies.

Data on shipping facilities, trade, and other information were collected and interested business men were informed.

The bureau assisted in devising ways and means of minimizing losses from theft and pilferage at the port.

Acting as arbitrator, the bureau successfully brought together interests where lack of agreement had previously

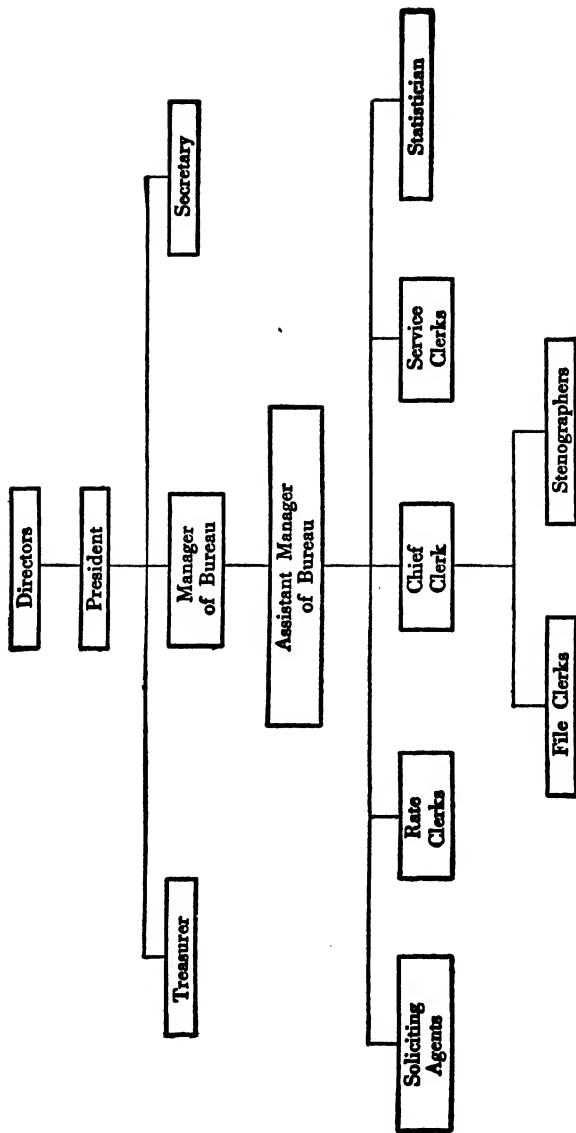


Fig. 59. ORGANIZATION OF A TYPICAL CIVIO TRAFFIO DEVELOPMENT BUREAU

threatened interference with the movement of large amounts of tonnage through the port.¹⁰

Port development bureaus and the industrial and commercial promotion bureaus of other cities perform substantially the same functions and are organized very much as the chart shown in Figure 59 indicates.

¹⁰ "Results in 1923," Report of Executive Committee, Port of Philadelphia Ocean Traffic Bureau, February, 1924, pp. 8 *et seq.*

CHAPTER XV

ADMINISTRATION OF INDUSTRIAL AND COMMERCIAL TRAFFIC DEPARTMENTS

Selection of Department Personnel

The duties of the traffic department are so intricate and comprehensive that the selection of the right men for the positions is of great importance to the executive responsible for the work of the organization. Two general plans are to be found among industrial companies, one or the other of which is used in selecting the personnel for the traffic department. In many instances, a traffic manager is selected because of his technical knowledge, his experience in transportation, his personality, and his executive ability, and the employment of the members of the departmental organization is attended to by him. The traffic manager is made responsible for the work of the department in its entirety, including the "hiring and firing" of the office force.

Other establishments, especially those in which an employment department is in operation, modify this practice to the extent that all employees of the traffic department as well as other departments are hired after applicants have been interviewed by a representative of the employment department and the regular procedure of hiring has been gone through with. The traffic manager usually interviews applicants and judges their special qualifications for the work of the department so that the concern obtains the advantage of having employment as well as traffic experts pass upon the men employed. Traffic managers of

companies where this latter plan is in vogue usually place their needs before the employment department, stating the number of men needed, the sort of work the applicants must be proficient in, and the special qualifications deemed desirable. The employment department is then in position to interview applicants with the needs of the traffic department in mind. Applications already on file may be examined to determine whether any of the applicants possess the qualifications desired and if such are found, requests are sent them to report for interview. If no such applications are on file, new applicants are interviewed and advertisements published for the specially qualified men needed. The traffic manager and his assistants are saved by this arrangement from the annoyance of keeping an application file and of interviewing applicants when no jobs are available. In almost all instances the traffic manager exercises the final right of selection of the men for the jobs for he is responsible for their work and should be the best judge of the desirability of the applicants.

The employment department performs, however, a very valuable bit of preliminary selective work. In general, it may be safely said that most small traffic organizations in smaller industrial and commercial concerns are recruited directly by the traffic manager, subject only to such limitations as to numbers of employees, salaries, and general qualifications as may be dictated by the executive head or heads of the concerns. In the larger departments among the great industrial organizations, much of the preliminary work in the selection of candidates is done by the employment department of the plant while the final selection is made by the traffic manager or by his assistants in whose subdepartments the man or woman is to be employed.

The general qualities which tend to make persons desirable employees, the moral, mental, physical, social, and other general qualities which we may for the sake of brevity

call the personal qualifications, must be ignored in this discussion as beyond the scope of this volume. Adequate treatments of the general subject of personnel selection are to be found elsewhere. We must confine our attention to the special abilities which tend to make for efficiency and success in transportation work.

Selecting the Traffic Manager

A successful traffic manager must possess or acquire a number of highly specialized qualities, which usually are acquired by a combination of technical training and experience blended with the happy faculty of observation and the ability to absorb and retain information.

1. He needs a thorough grounding in the principles of rate structures, not only in the territory in which the concern he represents is located, but in all sections of the United States, so that intelligent comparisons of rates paid on the commodities handled may be made with rates paid by competitors in the same territory as well as with rates paid for similar movements of traffic in other territories.

2. The manager of a traffic department must be thoroughly familiar with the basic principles of tariff construction and be able to interpret and apply freight tariffs. The tariffs applicable to the business of the industry are usually numerous and the interpretation of such tariffs difficult. Thorough training, practice, care, and intelligence are requisites to the successful interpretation of the complicated freight tariffs in use.

3. The principles of freight classification and the faculty of interpreting classifications so that the commodities handled may be protected from discriminatory classification, must be part of the equipment of a traffic manager. This presupposes the ability to read and interpret the ratings, rules, and directions of the Consolidated Freight Classifi-

cation and the state and foreign classifications applicable to the industry's traffic.

4. The rules and practices of the railroads, steamship lines, and motor lines concerning packing, marking, and protection of freight, the special needs of the product in the matter of packing, the most efficient method of fitting goods to containers and containers to goods and the selection of proper containers—all these are essential parts of the equipment of the industrial traffic man. It is true the actual performance of the detail work is often delegated to subordinates in the shipping room, but the broader, more constructive phases of this work must be done by the traffic staff and controlled intelligently by the department manager. Without a thorough knowledge of this work, effective supervision is impossible.

5. The other side of this problem is that of effectively controlling the receiving of inbound shipments. The nature of the inbound commodities and the special requirements of the industry must be analyzed so as to obtain the most effective service from suppliers to the plant. The traffic manager, if he is to obtain this service, must be as familiar with the carriers' rules concerning the packing, marking, protection, and effective stowing and loading of goods. Containers adapted to inbound traffic must be selected in the same manner as for outward shipping. The two are halves of a very necessary unit of the successful traffic manager's equipment.

6. The traffic manager must have an excellent knowledge of general geography and a highly developed specialized knowledge of traffic and transportation geography. He must be familiar with the numerous railroads, steamship lines, and highways in the United States, or at least those in the sections from which commodities are bought or in which goods are sold by his company, so that he may be in a position to route his traffic effectively. He must know

rate territories, basing points for rates, crossing points, junction, transfer stations, and other significant traffic geographic locations.

7. A thoroughly equipped traffic manager must have at least some training in legal procedure. He must be familiar with the law in so far as it concerns the liability of carriers by rail or water, with the legal provisions of shipping documents, with the procedure to be followed in the preparation and presentation of claims and with procedure before regulatory bodies of the state and Federal governments.

8. Another essential part of the mental equipment of the successful traffic manager is a thorough knowledge of the product of his industry. He must know the raw materials brought into the plant, the manufacturing processes through which the raw material is put, and the nature of the finished product. Continuous attention must be paid to the processes, costs of production, and changes in the raw materials or product so that rates and classification ratings may be kept in proper alignment. A traffic manager must know his product thoroughly to be able to convince rate- and classification-publishing authorities of the justice of his contentions for rate and classification adjustments. Pigs may be pigs to the casual observer but the expert can point out and convince open-minded persons that there are subtle differences between the breeds which may make changes in rates and ratings justifiable.

9. Alertness of mind is an essential quality for the successful traffic man. He must be keen to see discriminations and undesirable conditions affecting his industry adversely and must be mentally alert to keep abreast of changes in industry and transportation. Things have an unpleasant way of not "staying put" in the field of transportation and changes are continuously occurring to disturb the rate and service situation. The traffic manager who fails to keep informed through his contacts with others in traffic and

trade associations, and through newspapers, technical magazines, and books upon transportation subjects as well as through the decisions of courts and commissions, falls hopelessly behind in the rapid march of progress in transportation.

10. Not only must the traffic manager be alert to know the rights and obligations of the industry and to keep informed as to progress in the field, but he must be aggressive in the presentation of his company's case before the carriers, commissions, and courts. A distinction must be made, however, between legitimate diplomatic aggressiveness and indiscriminating pugnacity. The overly pugnacious traffic manager is apt to overreach himself and embroil his concern in needless and fruitless litigation. The net result of such unwise conduct is the discounting and prejudice of the traffic man's legitimate requests upon the carriers. It remains for the traffic man to steer a course between the rocks of overaggressiveness on the one hand and lack of legitimate aggressiveness on the other. He should determine what the industry needs and present the request diplomatically but forcefully.

11. The successful traffic manager, in addition to the equipment of technical transportation information and ability along traffic lines, must have extensive training in industry so that he may cooperate intelligently and effectively with the heads of other departments of the industry and with the executive heads of the concern. He must be a man of sufficient breadth to win the cooperation of the heads of the purchasing, sales, advertising, production, order, stores, engineering, and other plant departments and big enough to accept suggestions from these department heads. Many industrial concerns have conference organizations, composed of the heads and in some cases the assistant heads of the various departments and company executives, which meet periodically to discuss prob-

blems of plant management and the difficulties experienced by the departments in the conduct of business with other departments. Questions of company policy, trade customs, organization, procedure, methods, production, costs, records, strategy, and interdepartmental relations are discussed and difficulties adjusted. Industrial management, if it is to be successful, requires that the heads and members of the various plant departments coöperate fully and freely with others for the ultimate good of the whole industry. Teamwork is the *sine qua non* of successful management and the department heads must be men who are "team minded" and who will play the game as members of the team for the ultimate good of all and not for their own particular glory.

12. The qualities necessary for successful service in industrial and commercial traffic management include a generous amount of executive ability. Not only must the traffic manager be a technician of high order and an employer, but he must also be a capable department executive. He must be a man who can win the loyalty and inspire the enthusiasm of his subordinates in his department. Much of the routine work of the department must be delegated to others and performed under the supervision of the department manager. He must apportion the work among the employees, maintain discipline, build up and maintain a high order of department morale; he must stimulate the department to perform the quantity and quality of work required and must put and keep the department on a high plane of technical efficiency. A good executive must be a good leader imbued with high ideals regarding the purpose and methods of the department and the ability to impart these standards to others. He must visualize clearly just what work is to be performed by his department and set the goal of achievement before the eyes of the members of the group which he leads. After the goal has been set

the executive must invite the coöperation of the members of the departmental organization in determining the methods to be employed in achieving the desired results. The ideas of each worker should be sought and discussed in fairness and the good ideas taken under consideration. Each man should be made to feel that he is an essential part of the organization and that he is a human being with an idea or two which is needed to bring about success, and not that he is an automaton, without mind or voice, to do as he is ordered without thought—"His not to reason why, his but to do and die."

Once the wheat has been culled from the chaff, the good ideas should be adopted and clear-cut orders should be issued as to the duties of each bureau or "desk" and individual composing the department, so that overlapping of functions may be guarded against and no work left undone because no one was detailed to do it. Standards, working conditions, schedules, procedure and standard practice orders issued after consultation with the department staff and as a result of the suggestions of the members of the organization are apt to be more heartily supported by those who must observe them than if they were handed down as absolute orders from the head of the department as if from a throne. Absolute monarchs appear to be as hopelessly out of style in industry as in Western World politics.

The successful executive must win rather than coerce the support of his subordinate associates. He must distribute the work, fix hours of service, vacation periods, salary increases, promotions, and other features of the employees' relationships to each other and to their jobs with justice and impartiality. Men in a department are quick to notice if preference is given to certain men without apparent regard to their ability and if a feeling of injustice continues, the morale of the department tends to be lowered. Absolute fairness and open-mindedness are

essential qualities of a good executive. Each man must be made to see by words and deeds that ability, faithfulness, and enthusiasm are the factors which determine promotion and salary increases and that each man has his opportunity of proving his worth and receiving his reward according to his merit. The executive must convince his subordinates that an open road is maintained for talent and ability and that the department is administered democratically in the best sense of that much misused word.

This general and somewhat sketchy discussion of twelve essential attributes of a successful traffic manager, which seem to the writer to be necessary parts of the makeup of an industrial traffic manager, may appear to some to be an attempt to paint an exaggerated picture of an industrial traffic manager as a paragon of all virtues and as one endowed with gifts of all knowledge. Such, however, is not the case. The job of successfully managing an industrial or a commercial traffic department is an exacting task calling for a high order of technical and executive ability. The whole problem of distributing goods underlies the work of the traffic manager and the problem is a complex one. Time was when the ability to obtain special concessions from the railroads and to pack, mark, and route shipments, file claims, check freight bills, and trace freight were the important qualifications of the traffic manager. This meant that a man with sufficient railroad experience to know how to obtain concessions and perform the routine duties described was in general fitted for the task of managing the traffic department of an industrial plant or a commercial house. The present-day traffic manager must not only be able to direct the packing, marking, and routing of shipments, the checking of freight bills, the tracing and expediting of freight, the preparation of freight claims, the obtaining of equipment and other routine services, but must be a counselor to the sales, purchasing, production,

advertising, and other departments and customers of the concern and perform the coöperative and constructive functions mentioned more fully in earlier chapters of this discussion. In short, the traffic man must be carefully selected, for the work in hand is complicated and exacting.

The Selection of the Departmental Staff

The selection of the subordinate members of the traffic department, whether undertaken by the department manager alone or with the preliminary assistance of a company employment department, is a matter requiring painstaking care if an efficient personnel is to be obtained. It is rare indeed that a full complement of men and women must be obtained at one time, for usually departments when first organized are apt to be small organizations which are increased in size by the addition of an employee or two as business increases. Vacancies are filled by the promotion of an employee already in the organization or the employment of a new one as resignations occur. There is usually sufficient time to permit the careful examination of applicants so that men suited to the work by training, experience, and temperament may be obtained. In recruiting workers for the lowest jobs in the organization it is well to bear in mind that these men or women may some day hold the higher positions. A department trained so that each employee is fitted to assume higher positions is never seriously embarrassed by the sudden removal of any one employee, and a department which maintains a policy of filling vacancies by promotions from the lower ranks is apt to have a high departmental *esprit de corps*. Each new employee, therefore, should be selected with two things in mind: first, the desirability of the applicant for the position to be filled, and second, the potential qualities of the prospective employee as material for development into a candidate for higher positions. Many traffic depart-

ments, especially in the larger industrial and commercial concerns, are built up entirely upon this principle. All new members are taken in at the lowest jobs and all vacancies filled by promotion.

The assistant traffic manager or assistants, if the size or mode of organization of the department makes more than one assistant desirable, should be men fitted to take over the duties of the traffic manager in his absence or in the event of his resignation. They should be well trained technically in all branches of traffic work and, if several assistants are employed, should be highly trained specialists in one or several special phases of traffic work. Many such assistant traffic managers are expert rate and tariff men, claim experts, or service men. They should possess, in addition to adequate technical training, sufficient executive ability to handle the department in the manager's absence and their subdepartments if the department is divided into bureaus or subdepartments. A thoroughly desirable assistant should be very nearly as well trained technically as his superior and lack only the development experience in the department's executive work will bring. Lack of experience is a defect which time well spent will correct. Few departments can afford to pay sufficiently high salaries to hold assistants who are as thoroughly equipped technically as the department manager and who have executive ability equal to his. Such men will naturally seek to manage departments of their own. The ideal assistant, therefore, should be a man capable of development.

In employing a man or men to take over the detailed rate and tariff work of the department, care is exercised to insure getting men with thorough training in rates, both theory and practice, and men familiar with tariff construction and interpretation. The man to head the rate desk or subdepartment in a large organization must be a man of sufficient executive ability to administer his division, while

a man handling the desk alone in a smaller department must be an able rate man but need not possess such a large amount of executive experience. An adequately trained rate man should be familiar with rate structures in all territories, tariff construction and interpretation, classification application and rules, and with procedure necessary to effect changes in rates and classifications. He should be a capable correspondent and be able to present his company's case diplomatically yet forcefully to the carriers' representatives. He should be a capable rate statistician so that he can prepare charts and exhibits showing rate data for use in connection with rate change requests made of the carriers or in formal and informal complaints before state and Federal regulatory commissions.

Men for the claim desk or subdepartment need to be familiar with the laws governing the liability of carriers and the procedure to be followed in the presentation of claims against the carriers. This presupposes thorough familiarity with claim forms used in connection with all forms of loss, damage, and overcharge claims, and with the preparation of the documents necessary to support such claims. The work includes investigation of the claims and a broad field of constructive work is offered in the elimination and reduction of claims by the application of better methods of shipping. The assistants in the claim bureau are often men with less general training and experience than the chief in charge of the bureau but men of such caliber as to make potential bureau or divisional heads. Some may be specialists in one phase of claim work, such as claim investigation or prevention work, while others may be general clerical claim men attending to miscellaneous detailed work of the subdepartment. Men who have had experience in the claim or claim prevention departments of the carriers or who have been employed by inspection and weighing bureaus are considered by the managers of

many traffic departments as ideally trained men to attend to claim matters for an industrial or commercial traffic department. Such men need only the benefit of training in the methods used in the department to handle the concern's claim affairs efficiently.

The men in charge of the detailed work of tracing, expediting, car service, and service arrangements of various sorts needed by the industry must be technically trained in the field of their specialties and have sufficient experience to be able to make the desired arrangements with the representatives of the carriers. Routing is often attended to by an assistant traffic manager or by the department head personally, but in larger organizations special men attend to the keeping of records of comparative running times, service, and other facts of value in selecting routes. Such men must know the physical properties of the various rail, water, express, and motor carriers and the service they afford as well as the rates over the various routes so that transportation may be bought effectively.

Tracing and expediting men likewise must be familiar with routes, junction points, transfer arrangements, interchange facilities and schedules of the lines used in transporting and must know where to apply to have shipments hurried forward or traced if overdue.

Car service and demurrage men must be familiar with the procedure to be gone through to obtain cars as needed and to control the charges for detention of cars. If the industry owns and operates private plant facilities and private cars, these men must be familiar with the *per diem* rental rules, Master Car Builders Rules, and other rules of the carriers regarding privately owned rolling stock.

Service men who must arrange for lighterage, storage, transit, and other services must be familiar with the tariffs of the carriers governing such services, and with the procedure necessary to obtain such services, and with the

highly technical rules governing the arrangements. All of these jobs are highly specialized phases of traffic department duties. These are performed in the larger departments by specialists devoting their entire time to the work, and in smaller organizations by a member performing the work as part of his varied duties.

The men in charge of the shipping and receiving rooms are usually selected because of their knowledge of the carriers' rules and regulations regarding packing, marking, weighing, and otherwise preparing freight for shipment and for their ability to attend to the records which must be made of shipments forwarded or received. The selection of proper containers and the protection of goods without undue expense of packing or unnecessary charges for extra weight is an art which requires a combination of wide knowledge of containers and shipping conditions and experience with various goods and packages. Many shipping room foremen are specialists not only in that they have devoted many years of their business life in shipping goods but in handling one line of goods. The writer recently remarked the fact to one shipping room foreman who stated that he had spent more than thirty years in shipping room work for four different drug houses and he said he recalled many men who had specialized in much the same fashion. They had changed jobs occasionally but had gone from one concern to another in the same general line of business. They had become so familiar with the details of shipping one type of commodities that to handle another seemed almost like entering a new line of business. Modern shipping practice has become more a matter of becoming proficient in the published regulations of carriers and familiar with the results obtained in laboratories and by other shippers with standardized containers, so that this wealth of experience is no longer as essential as before. Much of the experience of shippers in the past could be learned only

by the slow and costly method of "try and miss." Now the carriers are conducting educational campaigns to develop better shipping practices and container companies are manufacturing scientifically correct packing devices which are adapted to certain kinds of freight. Technical knowledge is of more value now in selecting shipping room men than formerly and long experience, while still valuable, is not so vitally necessary.

Other employees in the shipping and receiving room organizations should be selected not only because of their ability to perform the rather elementary tasks of trucking, packing, weighing, loading, bracing, marking, checking, and recording, but for their likelihood as men potentially capable of doing more responsible and important work. These men should, if possible, be men who are likely material out of which to make gang foremen and shipping and receiving room superintendents, if the morale of the organization is to be maintained and the labor turnover reduced. Many concerns draw their shipping room personnel from the labor and clerical forces of the local stations of the railroad, express, and steamship lines. These men are usually familiar in a general way with the rules and regulations of the carriers and are accustomed to handling freight in the way the railroads require that it be handled.

Industrial plants which have tracks and rolling stock of their own to handle the spotting of inbound cars for the concern must employ men to run the locomotives and attend to the tracks as well as to perform the office and supervisory work of the department. Locomotive engineers, firemen, traveling crane operators, freight train conductors and brakemen, yardmasters, switchmen, time clerks, car clerks, and other highly specialized workers are needed to run the industry's miniature railroad. These persons are usually drawn from the employees of the carriers and may be regarded as a group of specially trained workers whose skill

and experience can best be obtained in the railroad service. The superintendent of the local transportation department is often a former train master or dispatcher trained in the railroad service. He must be familiar with train rules of the carriers as well as capable of administering the work of the plant department.

Chauffeurs, mechanics, garage men, helpers and clerks are needed for the management of the local motor transportation work of the plant. These men constitute another group of specially trained workers who are employed, in most instances, for their ability to handle the specific job for which they are hired. Although these men do not, as a rule, make ideal material out of which to make men to fill the higher positions in the traffic department, yet they may be selected as probable candidates for foremen and superintendents of the motor transportation department. Garage foremen, men to take charge of the chauffeurs, and expert mechanics are needed by large organizations. If they can be obtained from the lower ranks of their own motor truck department an advantage is obtained, for such men from the ranks are already trained in the policy and methods of the company.

The burden of detailed clerical work is so heavy in many large industrial and commercial traffic departments that the supervision of such work is delegated by the traffic manager to a chief clerk or office manager. Such a position requires that the person filling it acceptably be thoroughly trained in office practice and capable of handling the force of clerical workers under his jurisdiction. Filing clerks, stenographers, messengers, statistical clerks, and other special office workers are employed to attend to the routine work of the organization. These minor but necessary employees, if selected with care, constitute a source of supply of future technical clerical workers to fill the higher positions in the department. Many concerns en-

courage their minor employees to study traffic and transportation and become familiar with the methods used in the department. In some cases the department encourages all employees to take technical and general courses so as to become fitted to assume positions of greater responsibility in the organization. Stenographers, filing clerks, and similar clerical workers have an unusual opportunity to become familiar with department routine and if the technical background is acquired, such persons make ideal subjects for advancement.

Routing Work through the Department

After a capable personnel has been employed and carefully executed standard practice orders have been issued defining the work to be performed by each member of the organization, the next logical step taken in the administration of many well managed departments, is the routing of detailed work which must pass through several hands in the process. This involves not only the determination of the order in which various clerks or desks are to handle a given piece of work but also the arrangement of the office equipment and furniture so that men doing similar work and those who have occasion to get information from one another may be placed close together. Members of the rate bureau or desk should be placed close to one another so that unnecessary traveling back and forth is eliminated. Similarly, the members of the rate, tariff, and overcharge bureaus should be grouped in one part of the office room so that the men who have occasion to consult one another most frequently may be conveniently placed in relation to one another. All men who have occasion to use the tariff files have their desks placed close to the tariff-filing cabinets. Stenographers and file clerks are located adjacent to the files while the general library of reference books is located so as to be conveniently placed for the traffic man-

ager. Claim record files are similarly placed close at hand for the use of members of the claim division or bureau. A large steel corporation's traffic department, housed in three rooms of a large city office building, is laid out so as to conform to the traffic manager's ideas of efficient arrangement. A diagram of this office is shown in Figure 60.

The manager of this department interviews many callers and has reserved a large room in the middle of the three-room suite. This room has doors leading into the rooms on either side where the office force is quartered with a door leading to the corridor of the building. The visitors' entrance, however, is through the door of the chief clerk's office. The traffic manager's private office contains his desk and the general reference library of the department as well as the complete set of atlases and charts. A number of chairs are provided for the use of the visitors and for conferences which are held from time to time between the members of the traffic department and between the head of the traffic department and other departmental managers of the corporation.

The main entrance to the department leads to the office of the chief clerk. A mail clerk receives incoming mail for the department and distributes it to the desks for which it is intended after it has been opened and the time and date received have been stamped upon it. The chief clerk in many instances attends to the distribution of the mail among the members of the department. The mail clerk, in this instance, also receives visitors and refers them to the chief clerk or the traffic manager or to the other members of the organization.

In this room are the general correspondence files of the department, and the filing clerks who attend to this work are placed close to the filing cabinets. Behind their desks are the desks of the general department stenographers. This room also houses the expediter and the trace clerk

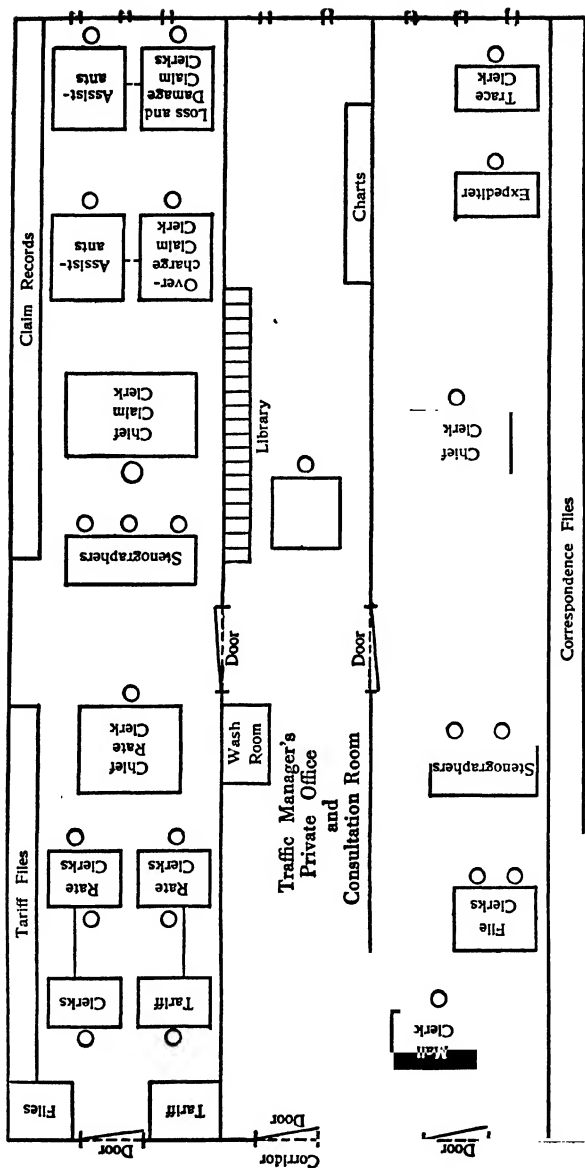


Fig. 60. FLOOR PLAN OF A TRAFFIC DEPARTMENT OFFICE

who attend to the transportation service work of the organization. Their desks are also placed close to the correspondence files so as to economize their time.

The third room of the suite is lined on both sides of the entrance door from the corridor by tariff files. Half of another wall is also lined with tariff-filing cases. The desks of the chief rate clerk, the rate clerks, and the tariff clerks are grouped together in one half of the room adjacent to the tariff files. Shelves are placed in front of the filing cabinets so that tariffs may be examined conveniently. The other half of the room is occupied by the chief claim clerk and the overcharge and loss and damage clerks and their assistants. Close to them are the claim-record filing cabinets. The stenographers who take the dictation of the rate and claim men are placed in the center of the room, so that each bureau can use their services conveniently.

Work is routed so that the incoming mail reaches the mail clerk first. This clerk opens and time-stamps the mail and passes it on to the file clerks, who take the previous correspondence on the subject from the filing cabinets and turn the complete file to the chief clerk. After the chief clerk has examined the papers to determine if they are properly associated, the file is turned over to the chief in charge of the desk which attends to the matter referred to, or to the traffic manager if the subject is one handled by the department head personally. The work is then assigned to the man who is to actually do it.

Outward mail is dictated by the various clerks or bureau heads and signed after the letters are typed. The entire file, including the original and carbon copies of the newly written letter, is forwarded to the chief clerk. The original outbound letter is sent to the mail clerk for mailing, the file with a carbon of the outbound letter is handed to the filing clerks for the general files, and carbon copies of each letter written each day in the department are col-

lected into a daily-reading file, which is read by the traffic manager, chief clerk, and the various bureau heads. In this way the manager and his principal assistants are able to review each day's work and to keep informed concerning the work of the whole department. The style and con-

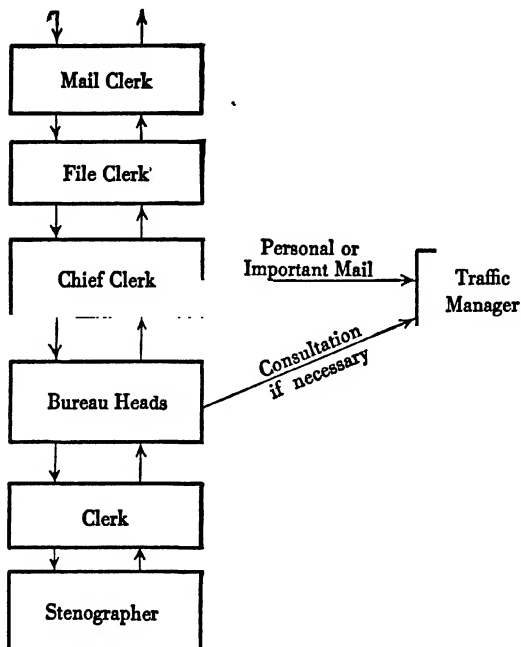


FIG. 61. ROUTING OF MAIL IN A TRAFFIC MANAGER'S OFFICE

tents of outgoing letters may be examined and efforts made to correct English and facts if such action is necessary. The work of each stenographer may be checked in this manner so that the tasks may be evenly distributed among them and the slovenly and inaccurate work eliminated. Letters are the representatives of concerns, and careless, in-

accurate, and slovenly letters are apt to reflect a condition existing throughout the department and even the company. Many large concerns are bending strenuous efforts to improve the English, appearance, and style of their letters.

Work routed in the fashion indicated above moves logically and without waste motion from person to person, as is shown in Figure 61.

Hours of Service and Compensation for Overtime Work

In general, positions in the traffic departments of industrial and commercial organizations are considered as salaried positions for which definite weekly, semimonthly, or monthly salaries are paid regardless of the actual number of hours spent per day or per week at work. Office hours vary in different plants and offices, the traffic department working, as a rule, the same number of hours as other departments of the organization. In industrial establishments in which the traffic department is located at the plant, it is common for some members of the department to come on duty daily at 7 A.M. to attend to car service and other matters of similar urgent character. Other members of the department may report at 8, 8.30, or 9 A.M., depending upon the reporting hour for members of other office workers. Quitting time comes from 4 to 6 P.M., depending in most instances upon the usual quitting time of the plant's office forces. Some industrial traffic departments are organized so that car service, shipping and receiving and local transportation men work the same hours as the factory workers, say from 7 A.M. to 4 P.M., while the supervisory and clerical traffic men work the same hours as the other clerical workers of the establishment, say from 8 A.M. to 5 P.M. Eight hours per day, five and a half days a week may be considered the typical standard working day, although instances may be cited of longer daily hours and

six full days per week. Such cases are exceptional rather than the rule however.

It is often necessary, when the industry is working full time day and night, to maintain shifts of local transportation men in yard service and sufficient clerical workers to attend to this work. In such cases two or three shifts of men in the yard service work eight to twelve hours each day. Car clerks and other inside workers are divided into corresponding shifts.

In commercial traffic departments and in the general headquarters organizations of industrial traffic departments which are located in office buildings, the usual day is seven hours, from 9 A.M. to 5 P.M. Saturday half holidays are common the year around and almost universal in the summer months. Some offices open at 8 or 8:30 A.M. and close as late as 5:30 P.M., but again these cases are outnumbered by the organizations working the standard seven-hour clerical working day. Vacations of one or two weeks annually with pay are given in many instances, but not in all.

Overtime work beyond the standard day is occasionally necessary in all organizations. In the matter of compensation for such extra work, there is a variety of practices. Some concerns consider that the weekly or monthly salary is paid for normal hours of service and that overtime work should be paid for by extra compensation. Even among those who pay for overtime service there are some differences in practice, for a number of concerns pay an hourly sum equal to the employee's regular hourly rate, as determined by his weekly salary divided by the hours of service per week, while others pay "time and half time," one and a half times the normal hourly rate, and others double this rate. Other concerns set no definite hourly basis of compensation but merely pay for extra meals the overtime worker must buy and others pay a lump sum bonus for overtime.

Local transportation men—including yard crews, yard-masters, switchmen, motor truck men, shipping and receiving room employees—usually receive extra compensation for overtime work, usually at one and a half times the normal hourly rate for service beyond the normal working day and double the normal rate for work on Sundays and holidays.

Clerical workers in general traffic headquarters or in commercial traffic departments as a rule receive no extra compensation for their overtime work, excepting an allowance for the evening meal. Bonuses are sometimes paid and consideration is often given to the amount of overtime work done in making increases in salaries. The usual practice is to increase the personnel of the department so that overtime work is eliminated except for the occasional night or so during periods of exceptional rush. Continual overtime work is discouraged in many lines of business because of the excessive fatigue which results after a protracted period of overexertion.

In general, the hours of service and the compensation for extra service, may be said to be governed by the general policy of the company in such matters. Hourly workers are almost universally paid overtime and salaried workers, seldom. The traffic departments are manned, for the most part, by salaried clerical workers, who are paid in the same manner for extra service as the employees of the order, purchasing, accounting, and other office departments.

Bonus payments of a percentage of the annual salary or lump sum payments are sometimes made to reward especially meritorious service. Valuable suggestions, extraordinary loyalty, or other services of a similar character are sometimes recognized in this substantial fashion. Whether or not bonuses are paid is usually determined by the practice of the management of the company rather than the individual judgment of the traffic manager. Many com-

panies prefer to recognize extraordinary service and ability by salary increases rather than bonuses. Promotions and advancement are more substantial rewards than mere bonus payments for they stimulate men to continued activity and encourage the men to believe that their future is bright in the department. Bonuses are condemned by many as tending to make men mercenary, while others defend such payments as reasonable returns for services rendered in addition to the services contemplated in the regular job.

Office Equipment

No office organization can function efficiently without proper equipment. This does not necessarily mean that the department must be equipped with elaborate mahogany desks, thick carpets, and beautiful pictures, but there are certain articles of furniture which are vital parts of the department's equipment. Floor coverings, pictures, and the kind of wood out of which the desks are constructed may be ignored, as matters of this sort are usually determined by the policy of the company. The kind of filing devices used for correspondence, claim records, and tariffs, the sort of worktable equipment, variety of index system, and the general arrangement of the equipment in the office, however, are matters which the manager of the traffic department must for the most part decide for himself, in consultation with the members of the department.

Sweeping generalizations are impossible in the matter of office equipment, for each department must be equipped to meet the needs of the particular organization and out of whatever funds are available for the purpose. Certain items of equipment have become more or less standard parts of the equipment of a large number of departments and are indorsed by the managers of many departments as aids to efficient work.

Correspondence-filing devices in many styles and ma-

terials are manufactured by office equipment companies, many of which devices are different only in minor details. The kind found most commonly in use in well equipped traffic departments are the vertical files, with sliding drawers, sometimes equipped with rollers, so that they may be opened and closed conveniently. Usually these cabinets contain tiers of three, four, or five compartments so that the space devoted to filing may be reduced to the minimum consistent with convenient use of the files. Vertical letter-size filing compartments permit of the safe and convenient storage of all forms of correspondence.

Claim records are usually kept in special files separated from the general correspondence files, but housed in the same kind of vertical filing cabinets. For freight tariffs, several types of filing cabinets have been referred to elsewhere (Chap. VIII).

Dead files are also provided for old correspondence concerning matters which have been disposed of. Such papers are kept for a period of years in a separate battery of filing cabinets and later sent to a storage place where they may be safely kept for reference in case the records are needed to supply evidence in legal proceedings or business disputes. A card-index system is usually kept as a guide to the files.

Flat-top desks or tables are found in the great majority of departments. The old-fashioned high desks and stools, reminiscent of the counting houses and railroad freight stations of former years and the roll-top desks, popular twenty years ago, have given way to flat working surfaces. Desks, equipped with drawers for supplies and the safe-keeping of unfinished work, are found in many departments, while tables without any drawers at all, except a small one for office supplies, are used in many others. Unfinished work is kept in desk trays if tables are used.

The arrangement of the desks, tables, filing cabinets, and

other office furniture, so as to give adequate light and proper ventilation, is important to the efficiency of the department but again generalizations are impossible. Each office must be planned according to the limitations of the quarters provided to house the organization. It is important that sufficient space be provided for proper aisle ways between desks and in front of cabinets so that the employees may work without crowding.

Sufficient light should be provided to prevent eyestrain. Desks should be arranged so as to give the desk worker the advantage of sunlight, but if such arrangement is impracticable, artificial light should be provided and lighting devices used which give light without glare.

The matters mentioned in connection with the equipment of the office appear to be minor details and perhaps are. These little things are ignored in many offices with marked effect upon office morale and efficiency. Considerable attention has been paid within recent years to factory equipment and layout and the effect of physical equipment on workers has been stressed. Too little attention has been paid to these matters in offices and the writer believes that greater attention to details of office environment is necessary. Good housing, proper equipment, and careful arrangement are vital factors in successful office management to the same extent that they are vital to successful factory management. An office force must have proper physical equipment as well as mental equipment, if it is to be efficient.

PART III

**THE BROADER FIELD OF TRAFFIC
MANAGEMENT**

CHAPTER XVI

TRAFFIC SERVICE BUREAUS

Definition

Traffic service bureaus have been established in many of the important shipping and receiving centers throughout the United States, to handle the traffic and transportation affairs for industries and commercial houses which have no traffic departments, or to advise those which have their own traffic organizations in certain phases of traffic work. A number of former railroad and industrial traffic men are to be found managing such bureaus or employed as members of the bureau's staff, working in the former instances as independent technical experts.

Service bureaus, unlike the traffic bureaus of chambers of commerce, boards of trade, traffic development bureaus and trade associations, which are supported by the fixed membership fees or contributions of members of the associations, are maintained out of fees received from individual clients for services rendered. Like bureaus maintained by these associations, however, service bureaus act as representatives of industrial and commercial houses in their dealings with railroads, steamship companies, and motor transportation carriers. The establishments are represented, not as a group, but as individual shippers or consignees, for the various firms represented may or may not have any connection with one another except the fact of representation by a common traffic service bureau. One individual or bureau may act as the traffic manager of a storage warehouse, an iron and steel broker, a chain of

retail stores, a pipe foundry, a clothing factory, a hosiery mill, a flour mill, and a grain brokerage house. In his relations with this group of concerns, the bureau manager acts as the agent of a number of different principals.

A. H. Ferguson, Manager of Transportation and Public Service, New Bedford (Mass.) Board of Commerce, in an article, "Where, When and How a Traffic Bureau," described a traffic bureau as

a service bureau, able to deal with the various matters pertaining to transportation. There are two essentials for its successful operations; a knowledge of the necessary details incident to transportation and the ability to apply that knowledge. . . .

There are a number of traffic bureaus which are strictly private commercial enterprises, having offices located in some of the larger cities and giving general traffic service to shippers subscribing therefore.¹

An outstanding development in traffic matters during the past five years has been the rapid growth in numbers of traffic service bureaus which are variously known as "freight bill audit bureaus," "associated traffic bureaus," "claim adjustment bureaus," "traffic commissioners," "commercial audit bureaus," and "traffic counselors." By whatever name known, the bureaus perform virtually the same functions, except that the audit bureaus usually specialize in the auditing and reauditing of freight bills as a major activity, while other bureaus perform this service as a minor activity and devote more of their attention to broader phases of traffic problems.

The Need For Service Bureaus

Problems of car service, rates, claims, and expediting are by no means confined to the larger industrial and commer-

¹ An address before the New England Association of Commercial Executives in meeting at Swampscott, Mass., published in the *Trade and Transportation Bulletin*, Chicago, Ill., October, 1923.

cial establishments. The small manufacturer, merchant, or distributor is vexed by the same problems that confront his larger competitor and his need for expert traffic advice and service is just as acute. Large numbers of smaller concerns have no traffic departments of their own, and rather than establish such organizations, choose to delegate traffic bureaus as their representatives in dealing with the carriers. The bureaus, acting as the traffic departments of the concerns employing their services, perform all the functions normally attended to in industrial and commercial traffic departments, including rate quotation, rate statistical work, tariff analyzation, classification analyzation, freight bill and demurrage statement auditing, routing inbound and outbound traffic, preparation, presentation, and collection of claims against the carriers, establishment of transit and other service arrangements, arrangements for car supply, preparation and prosecution of formal and informal complaints before the Interstate Commerce Commission and other regulatory bodies, as well as collaboration in suits involving traffic matters before courts of law.

Types of Service Organizations

Although virtually all traffic service bureaus perform more or less similar functions, several major variations in types of organizations are discernible among those in existence in various fields.

The first distinction which may be drawn is between bureaus doing a general traffic service bureau work, including many or all of the functions enumerated above, and the bureaus specializing in one or more of these special phases of traffic work. The Brunner Robeson Company, Inc., general and consulting traffic managers, Chicago, is an instance of a concern organized to handle a highly diversified type of business, embracing all phases of traffic work for a number of concerns doing business in the vicinity of Chi-

cago, Illinois. The Industrial Traffic Association of Philadelphia, also typical of these bureaus, is organized to function along similar lines. In contrast to bureaus of this type, are the organizations which, while equipped to handle any phase of traffic work, specialize in one or a few phases of the business. The Freight Bill Auditing Company, a Philadelphia concern, although doing other traffic work, specializes in the auditing of railroad, steamship, and express freight bills, while other bureaus which handle all lines of traffic work specialize in the presentation of traffic cases before state and Federal regulatory commissions.

Another distinguishing feature is the division between bureaus doing a general traffic business for a miscellaneous group of clients with no connection with one another and the bureaus specializing in traffic work for a group of affiliated industries or commercial houses or a number of concerns in one line of business. Typical of this latter group of bureaus are the organizations that specialize in traffic work connected with the perishable fruit trade. A number of bureaus, with headquarters in the principal fruit and vegetable shipping and distributing centers, check rates, audit freight bills, arrange for car service, attend to refrigeration service, arrange for diversions and re consignments, and prepare and collect claims for shippers and consignees of perishables. These bureaus, in some cases, are maintained by groups of producers or traders acting jointly, but in other instances are independent bureaus, managed by traffic managers especially skilled in this line of business and compensated by fees paid by subscribers for technical services rendered.

A third line of cleavage between service bureaus distinguishes the bureaus operated by a number of producers, distributors, or retail merchants acting jointly and functioning as the permanent official traffic representative of

the group, and the bureaus maintained by individuals as independent enterprises. These latter organizations derive their compensation in one of several ways to be discussed presently. The first group of bureaus may be called "co-operative traffic bureaus" and are different from trade-association traffic bureaus only in that there is no general association organization except the traffic bureau. This bureau forms the only connecting link between the associates. The manager's salary and the cost of maintenance of the bureau are borne by the proprietors of the organization and the profits of the bureaus—that is, the proceeds of claims collected from the carriers and rate adjustments secured—accrue directly to the concerns maintaining the bureaus. The bureaus of this type are not operated for the profit of the owner of the bureau, but, like trade association bureaus, for the protection and promotion of the traffic interests of the concerns maintaining the bureau. The bureaus operated as independent enterprises are operated by individual traffic specialists who solicit subscribers to their service. One plan, popular among the proprietors of traffic bureaus doing a general traffic representation business, apportions the expenses of the bureau, including salaries, rent, supplies, postage, telephone and telegraph service charges among the subscribing concerns on a membership basis. A monthly or annual membership fee is collected from each subscriber, varying in amount with the volume of traffic service performed or to be performed by the bureau. The fee charged in most instances represents an approximation of the share of the total expenses of the bureau each subscriber should equitably be called upon to bear. The percentage may vary from month to month, or from year to year, and changes in the amount of fee may be made accordingly.

All recoveries from the carriers are paid directly by the bureau to the shippers or consignees upon the receipt of

the payments from the carrier, and no commissions or other service charges are deducted.

Another plan of compensating the bureaus for their services is called by Brunner Robeson, President and General Manager of Brunner Robeson Company, Inc., Chicago, "the measured service plan." Under this plan, rates are quoted and checked, services arranged for, freight bills audited, and claims are prepared and collected for stated fees based upon the amount of service rendered. A charge is made for checking bills, per one hundred or larger unit, and successive unit amounts of similar work are performed at a decreasing rate per unit. The second unit quantity is charged for at a lower rate than the first and the third at a lower than the second and so on. A sliding scale is thus established so that the greater the volume of work performed the lower the charge per unit of such service. A distinction is sometimes drawn between the different types of work done and unit prices established for various kinds of service at varying rates. One unit charge may be made, for example, for the quotation of a hundred freight rates and a lower charge for the second and succeeding hundred quotations. Another unit charge may be made for auditing the first thousand freight bills and lower charges for succeeding thousands. A third unit charge may be established for arranging for a given number of diversions or reconsignments with proportionately lower charges for services in connection with diversion and reconsignments beyond this number.

In other instances a unit price is established for a miscellaneous group of services, including rate quotation, freight bill audits, diversions, reconsignments, and other services. Lower charges are made for additional work of a similar character.

Under this sliding scale method of compensation the preparation and presentation of claims against the carriers

are charged for according to the amount of clerical and technical service incident to the preparation of the claim papers. Additional claims beyond the first unit number are prepared and presented at rates slightly lower than the amounts charged for the work in connection with the first claims.

This scheme of compensation has marked advantages both to the proprietors of the traffic service bureaus and the subscribers to the service. The bureaus are assured of compensation based upon the amount of service performed and at the same time subscribers are encouraged to use the bureau freely by the decreasing unit prices for service after the first increment. The users of the traffic service bureaus pay for only the service they receive and obtain the lower rates if the volume of work is sufficient.

A third plan of compensation is the commission arrangement. Bureaus working under this arrangement receive a percentage of the amount recovered from the carriers in compensation for loss and damages and a percentage of the proceeds of overcharge claims, disclosed in the auditing of freight bills. The commission arrangement is not adapted as a method of compensation for services in connection with rate quotations, routing, tracing, diversion, reconsignment, or similar services without a definite fixed value. Services of this sort have a considerable actual value, however, and are paid for usually according to the "measured service" of the fee plans, discussed previously. A charge is fixed for each bit of service, according to the value of the service, and the amount of work expended by the bureau to accomplish the results.

Many traffic service bureaus that work on the commission basis of compensation specialize in the auditing of freight bills and the preparation of overcharge claims and devote little of their time to other phases of transportation work. These auditing concerns or traffic audit bureaus, as

they are commonly called, very often reaudit freight bills after they have been audited once by the traffic department of the industry or commercial establishment paying the freight charges, and, in some cases, after the bills have been audited a second time by a traffic service bureau. Commissions ranging from 25 to 50 per cent are charged for this reauditing service, the precise amounts depending upon the volume of work turned over to them and the number of times the freight bills have been audited prior to being given to them. Overcharge claims are prepared and presented by the bureaus to the carriers and the claims pressed for settlement. When the claims are paid, the bureaus and the concerns which have suffered the overcharges share the proceeds according to the percentage distribution agreed upon.

Commission compensation contracts are attacked by many transportation men on the ground that they are fair neither to the bureaus performing the service nor to those for whom the service is performed. There is no guarantee that the bureau will receive any compensation at all for checking thousands of freight bills—a task consuming hundreds of hours of time of skilled rate men—for there may be no incorrect bills among those presented for audit. A few incorrect bills involving small overcharges may be the entire result of many hours or days of painstaking work. On the other hand, an equal number of bills may contain many overcharges aggregating thousands of dollars. It is just as unfair for the bureau to receive such excessive compensation as for it to receive the niggardly reward for what was perhaps an equivalent amount of work but which unearthed few overcharges. Public accountants do not receive fees contingent upon the number and amount of errors discovered in the books audited, argue those who attack the commission plan of compensation, but compensation is received in proportion to the amount of expert

accounting work required to audit the accounts properly. It is of value to business concerns to know that their accounts are properly kept and, similarly, it is worth while for shippers and consignees to have their freight bills audited to be sure that only the proper amounts of freight charges are being paid.

Proprietors of traffic service bureaus, checking freight bills and presenting claims on a percentage or commission arrangement, defend the plan by arguing that many users of transportation service are not willing to pay fixed service charges for the work, but are willing to turn the bills over to the audit bureaus provided that it does not entail any expense. They are willing to share with the discoverers of errors even though the bureau may profit as much as they do themselves. Many freight bills would never be checked at all and large amounts of overcharges would remain uncollected if the audit bureaus were not unwilling to gamble on the chances of finding and recovering such overcharges.

Relation between the Carriers and the Traffic Service Bureaus

The carriers, as a rule, regard the traffic bureaus with mixed emotions. The bureaus, attending to all phases of traffic and transportation service for a permanent group of shippers and consignees as the delegated traffic managers of such concerns, are treated as the legitimate technical representatives of the concerns. The audit bureaus and other organizations, especially those doing second and third reaudit work, are regarded, rightly or wrongly, by the carriers as unnecessary supernumeraries in the traffic field. The carriers resent third parties profiting from railroad errors which have taken money away from shippers and consignees paying the incorrect rates. Such errors, argue the railroad and other carriers, are rectified when pointed out and substantiated by tariff references, and other excess

charges collected should be refunded to those to whom the money belongs—the payers of the charges—and should not be divided between such persons and those discovering the errors.

Rebuttal to these arguments is made by those who defend the auditing bureaus as commercially necessary institutions. The shippers and consignees using the services of the audit bureaus do so with the knowledge that the commission charge is to be paid only if recoverable errors are found, and are willing to pay a liberal contingent fee upon recovery of overcharges, rather than a more moderate service fee, payable whether errors are found or not. The concerns sending their freight bills to auditing bureaus for checking are usually not in a position to audit the bills themselves, and the overcharges, if not discovered by such bureaus, would probably never be corrected at all. Anything that can be salvaged out of the bills is considered clear gain by such concerns. for no expense is involved in seeking the errors.

Typical Traffic Service Bureau Organizations

The larger bureaus, equipped to handle all or virtually all of the more usual forms of traffic work, are organized, for the most part, along substantially similar lines. Smaller bureaus, with fewer employees, delegate a number of allied functions to one clerk instead of placing one man in charge of a single important function. Otherwise such smaller organizations are the same in organization as their larger prototypes.

Bureaus that specialize in a single line or a limited number of lines of work are organized accordingly. Audit bureaus will have a preponderance of rate and tariff clerks and few, if any, men in the organization to handle tracing, routing, expediting, and other services.

The bureaus are managed usually by a traffic manager,

or administrative head with similar title, assisted by a general assistant with authority to represent the head of the bureau in the latter's absence. The bureau may be and often is owned by the traffic manager or by this official and several assistants acting as copartners, or it may be owned by a corporation. In the latter case there is the regular complement of corporate officials—president, vice president, secretary, treasurer, and board of directors. In many cases the corporate officers are also employed in the bureaus as managers, clerks, or subdepartment heads.

In general service bureaus, the traffic manager and assistant or assistants supervise the work of the bureau and personally attend to the preparation of important rate adjustment cases, claims, and complaints before regulating commissions. In addition to these phases of the work, the procurement of new business and the retention of old accounts is usually attended to by the manager and his lieutenants. Some of the larger bureaus, however, have soliciting agents who devote their entire time to obtaining business for their bureaus.

A counsel, sometimes devoting his entire time to the work of the bureau but more often a practicing attorney, retained to attend to whatever legal business the bureau may have, handles the presentation of cases before courts of law and assists the bureau managers in the legal phases of practice before the Interstate Commerce Commission as well as other regulatory bodies. A few bureaus are managed by commerce attorneys, in which case no counsel is employed except in cases where consultation with another attorney is deemed advisable or when the volume of legal work makes legal help necessary.

A rate division in charge of a chief rate clerk and with a staff of rate clerks, tariff clerks, and express rate and tariff clerks, attends to the quotation of rates to clients and to other subdivisions of the organization. This division

of the organization also obtains the necessary tariffs from railroads, steamship, and motor transport carriers and maintains the tariff file so that the rate information may be readily accessible. Rates are checked, analyses and rate exhibits are prepared for use in support of pleas for rate adjustments. New markets, made possible by rate changes, are analyzed for the benefit of clients, classification problems are studied so as to make distribution economies possible, and suggestions are made as to improved methods of packing and billing so that the clients may obtain all the benefits arising out of classification and shipping changes.

In quoting rates the service bureaus' function in a way is very similar to the traffic departments of industrial and the commercial establishments. Rate information is obtained from tariffs or from the rate departments of the carriers by correspondence and the information, after being verified whenever possible, is transmitted to the purchasing, sales, or other interested departments of the clients' establishments. Information as to actual or prospective rate increases or decreases is given to the clients, so that they may be informed respecting rate changes affecting their business.

In the course of performing routine work in connection with freight rates, the attention of the bureaus is often attracted by rate adjustments which are discriminating against their clients. In such cases, the customary mode of procedure is for the bureaus to point out the discriminating rate structures to the clients affected before proceeding with attempts to have the discriminations removed. Work of this sort often involves extended negotiations with the carriers and may involve carrying the case to the Interstate Commerce Commission or other government administrative bodies. Such proceedings necessarily involve considerable expense and such work is not usually included in the contract between the service bureaus and their clients. If the concerns are convinced that the discrimina-

tions are material and there is a chance of successfully prosecuting their cases without undue expense, arrangements are made for the bureaus to conduct their clients' cases. Complaints of this nature are usually presented in the names of the clients, the bureaus acting as the official traffic representatives in the proceedings.

A claim division, supervised by a chief claim clerk, attends to the investigation of loss and damage claims, prepares the necessary documents, and presents the claims to the freight claim agents of the carriers. Freight bills are audited by men in this division and demurrage statements are checked for overcharges.

In presenting claims against the carriers for overcharges discovered in the course of auditing the freight bills, two different plans are followed. In many cases claims are presented in the names of the traffic service bureaus so that the carriers may make settlement directly with the bureaus. Freight claim agents of the carriers, however, very often refuse to recognize the bureaus as agents of the claimants unless powers of attorney are executed by the clients in favor of the bureaus. The granting of powers of attorney establishes the managers of the bureaus as agents of the clients in connection with the collection of overcharges claims and directs payments in settlement of claims to be made to the bureaus as agents of the claimants.

Clients are often reluctant to grant powers of attorney for this purpose so that the alternative plan of presenting claims for overcharge in the names of the clients is very widely practiced. The claims are prepared and presented by the bureaus precisely as under the first plan, except that the documents and correspondence in connection with the claims are signed by the managers of the traffic service bureaus as traffic representatives of each claimant and the company letterheads of the clients, and not of the traffic service bureaus, are used.

Claims for losses and damages are usually filed in the name of the individual claimants. The claim papers are prepared in the bureaus and the supporting evidence is obtained, in many instances, by the claim investigators attached to the bureaus who work in collaboration with the shipping and receiving department of the clients.

All claims for loss, damage, or overcharge, after they have been filed with the claim departments of the carriers, are kept in active files and are followed up periodically by the clerks of the claim division of the service bureaus, in order that such claims may not be outlawed by lapse of time. As the period of two years and one day within which suits upon claims may be instituted approaches, the claims are brought to the attention of the clients for authority to proceed with suits. If the requisite authorization is obtained the claims are turned over to the legal staff of the bureau which attends to the legal phase of the matter. Exhibits and other claim data are prepared by the claim clerks who collaborate with the attorneys in preparing and presenting the cases.

Not all claim work is necessarily litigation, hence we find many claim divisions of traffic service bureaus seeking to reduce the number of claims presented by their clients by suggesting ways and means by which claims may be avoided. Work of this sort tends to decrease the revenue of bureaus operating on a percentage compensation basis for the larger the volume of claims under such an arrangement the larger will be the earnings of the bureaus. It is almost too much to expect of human nature to look for constructive suggestions tending to eliminate claims from bureaus when their compensation is dependent upon the amount recovered from the carriers. Many concerns prefer, for this reason, to engage traffic service bureaus to handle their claim work on a fee basis rather than on a commission arrangement. Payment is made for services ren-

dered rather than a percentage of the amounts recovered. The bureaus are encouraged in this manner to work for the best interests of their clients rather than for their own immediate pecuniary reward. A number of concerns still pursue the shortsighted policy of compensating these service bureaus for the collection rather than for the prevention of claims, by making contracts agreeing to pay the bureaus a percentage of the amounts recovered from the carriers.

A tracing and expediting bureau or subdepartment is found in the typical traffic service bureau, supervised by a chief clerk or assistant manager, attending to the tracing of overdue shipments reported for tracing by clients and to the expediting of urgently needed materials. Tracing is done by subordinates in the subdepartment by correspondence or telephone interviews with the representatives of the carriers. Arrangements are made by correspondence or interview for the expedition of rush shipments. As soon as the bureaus are informed that urgently needed shipments are to be made, the proper railroad officials, or the officials of other carriers to handle the goods, are notified and requested to facilitate the rapid movement of the freight. If the need is sufficiently urgent, traveling expeditors are sent out from the service bureaus to follow the shipment through to destination. These men arrange for the placing of the cars on preference trains, whenever possible, and watch to see that the cars are handled promptly at each yard.

Service of this character is usually paid for on a *per diem* basis, the bureaus charging the clients an agreed-upon price per day for the services of the road expeditors and the traveling and other expenses of such men are borne by the client.

Routings for freight shipments are supplied clients upon request. The actual routes between given points of origin and destination are worked out jointly by the rate men and

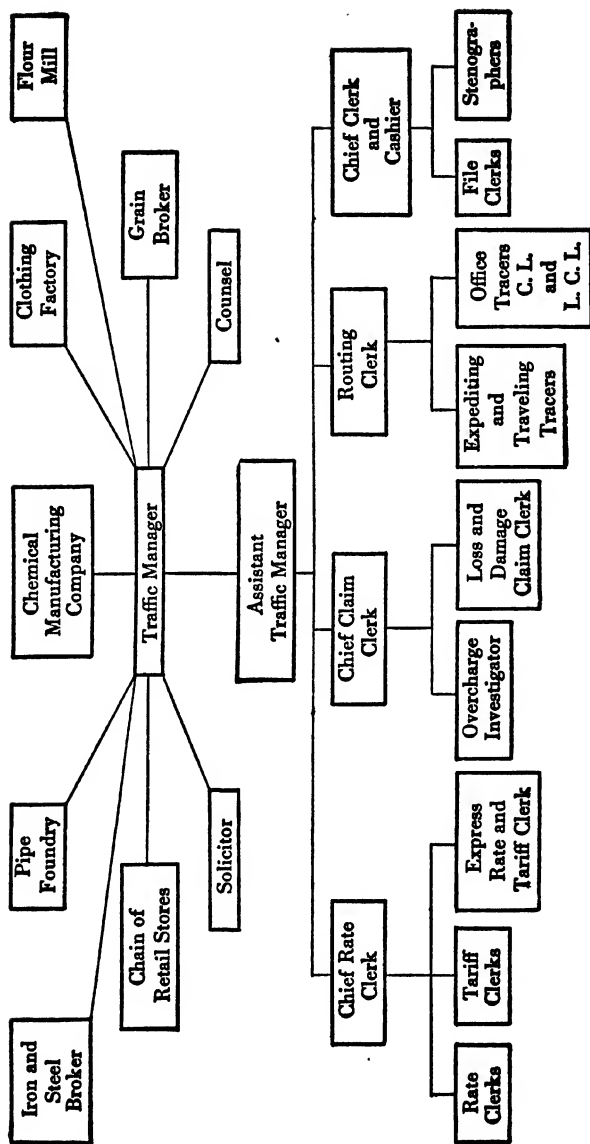


FIG. 62. TYPICAL ORGANIZATION OF A TRAFFIC SERVICE BUREAU

the tracing and expediting men of the bureau so as to give the clients the benefit of the lowest rates and the quickest and most satisfactory routes.

Other service functions, including reconsignments, diversions, transit arrangements, embargo permits, and the like, are handled by service clerks if the volume of business of this sort warrants; if not, by the employees attached to the rate, claim, or expediting subdepartments as part of their regular duties.

Another typical subdivision, found in many traffic service bureaus, attends to the general detailed clerical work of the bureau and takes charge of financial matters. A chief clerk, office manager, or cashier is usually in charge of this portion of the bureau's work, assisted in most instances by several or a number of stenographers and file clerks. The person in charge of this division supervises the work of the stenographic force and arranges for the installation and maintenance of adequate correspondence files. Bills for services rendered by the bureau are made out under the supervision of the cashier or chief clerk and payments are received and entered in the books of the bureau which are kept under his direction. Expense accounts of employees of the bureau are audited and paid and petty cash accounts are kept under the supervision of the chief clerk in charge of the division. Statistical studies, rate compilations, exhibits, charts, and similar jobs involving a considerable amount of stenographic and clerical service are, in many instances, prepared in the rough by employees in the rate, claim, or service divisions and are finished by employees of the chief clerk's staff. Work of this sort is carefully checked for accuracy by the heads of the sub-bureaus and usually by the manager or assistant manager of the bureau before presentation.

The organization chart shown in Figure 62 may be regarded as a typical traffic service bureau organized so as

to conduct an all-around traffic and transportation consultation business. Variations from this plan of organization may usually be accounted for by the nature of the business conducted by the bureaus.

Personnel and Equipment

The successful management of a traffic service bureau is an exacting task. The manager and the subordinate employees must be well informed traffic men thoroughly familiar with the technical requirements of their work. In addition to this technically trained personnel, it is essential that the bureau be motivated by a spirit of honesty and sincerity. The manager of the traffic service bureau has a very difficult course to steer if he is to retain the respect of the carriers and his clients. He must consider himself at all times as the traffic representative of his clients and must represent their interests and not his own. He must beware of claims of doubtful validity which may be offered him by clients for presentation, for one of the principal assets of a traffic service bureau is its reputation for absolute honesty. Claims may be presented in good faith by the bureaus and investigation may reveal that the claims were conceived in iniquity. The bureau, therefore, must investigate each claim offered so that it may be given a clean bill of health and championed with a clear conscience. Only when those handling the claims for the traffic service bureau are fully convinced of the righteousness of the matter, can they convince the carriers of the legitimacy of the claim and do justice to their clients.

Many traffic service bureaus maintain offices in the industrial and commercial districts of the larger cities, so as to be in close touch with their clients and with the offices of the carriers. Some of the larger organizations maintain branch offices at strategic points so as to be in closer contact with the carriers or the trade they serve. These branch

offices are in charge of district managers reporting to the head of the bureau and are, in personnel and in equipment, virtually miniature traffic bureaus.

Properly equipped bureaus maintain tariff files of considerable size, for many more tariffs are required for the proper conduct of a service bureau than are required in the average industrial or commercial traffic department. The average industrial or commercial traffic department supervises the shipping and receiving of a comparatively limited number of commodities between points in fairly well defined sections of the country. The traffic service bureau, on the other hand, represents a number of different establishments, shipping and receiving, as a rule, a long category of commodities between virtually all sections of the country. Elaborate tariff files, together with the necessary guides, directories, atlases, schedules, and classifications, are necessary for the proper handling of the business of the bureaus.

CHAPTER XVII

PROCEDURE BEFORE TRAFFIC COMMITTEES AND REGULATORY COMMISSIONS

The Traffic Manager's Task

An important phase of the work of leading industrial and commercial traffic managers has to do with the preparation and presentation of pleas for rate and service adjustments before committees of the carriers, classification committees, and state and Federal regulatory commissions. Maladjustments in rates or classification ratings applied to the raw materials or finished products become apparent to trained industrial traffic managers. These from time to time require attention. New rate schedules, provided for in the tariffs or tariff supplements issued by the rail, water, or express lines, which adversely affect the business of the concern, come to the attention of the traffic man in the course of his work in analyzing past, present, and prospective rates. General rate adjustments, involving whole sections of the country such as the Southeastern Rate Readjustment Inquiry conducted by the Interstate Commerce Commission in 1923-24, and other important rate revision cases before that body, make necessary the calculation by traffic managers interested in the movement of traffic in the affected territories of the effect of such changes upon the business of their companies.

Traffic managers of chambers of commerce, boards of trade, and other community business bureaus are called upon to ascertain to what extent proposed rate or service changes would affect the business interests of the com-

munities they represent. In like manner, the heads of the traffic bureaus of trade associations are concerned with the problem of finding out how changes affect the business of their members so that the case of the trade may be placed accurately before the carriers making the changes or before the state or United States regulatory commissions.

The task of the industrial and commercial traffic manager, then, is to learn exactly how the business he represents is affected by present or prospective classification ratings, rate structures, and service regulations and then to act as the spokesman for his business in presenting facts before the proper individuals, committees, or commissions. He must "sell" the industrial or commercial point of view to transportation and traffic officials of the carriers, classification committee members, or commissioners of the regulatory bodies.

Procedure with Representatives of the Carriers

The traffic representatives of commerce and industry are in almost constant touch with the traffic officers of the carriers hauling their freight. This contact makes it possible for numerous minor questions to be disposed of without the necessity of recourse to other authorities. Occasionally, however, requests for rate and service adjustments of greater importance, which in many instances are beyond the powers of the representatives of the carriers to grant, must be presented for solution. Service regulations, classification rules or ratings or rate adjustments, which are governed by classifications or tariffs on file with state commissions or the Interstate Commerce Commission, are sometimes sought to be changed in the interests of their businesses by the traffic representatives of shippers. Such questions as the traffic officers of the carriers are unable or unwilling to dispose of must be referred to the committees or commissions for adjustment.

The carriers are able and willing to attend to many complaints and requests themselves and in such cases the procedure entailed is very simple. The industrial or commercial traffic manager needs only to present his requests for the changes he seeks, in understandable form, supported by facts and figures to show the conditions created by the rates, rules, or regulations of which he complains and the result of the changes he requests to be made. This may be done in conference or by correspondence with the traffic officers of the carriers of whom the requests are made. Additional information may be requested from time to time until the whole matter is clear in the minds of those dealing with the problem. Negotiations of this simple sort do not require the establishment of any set procedure.

Procedure before Classification Committees

The Official, Southern, and Western Classification Committees maintain permanent headquarters in New York, Atlanta, and Chicago, respectively, and are prepared to receive propositions from representatives of the carriers or of shippers to change the rules or the class ratings to which articles are assigned or to provide for ratings to which new commodities appearing in commerce for the first time are to be assigned.

Applications may be made informally by letter or personal call for the opinions of the committee upon mooted questions of classification, or formal applications may be made for hearings before the committees to decide upon ratings or rules. Each classification committee docket such complaints and at intervals arranges for hearings to be held. Each of the parties to the complaint is given an opportunity to present his views and arguments and to submit data intended to support his proposition. After both sides have been heard, the committee decides the

matter and if changes in rules or ratings are to be made or new ratings provided for, these matters are published and become effective by the issuance of a supplement to the Consolidated Freight Classification or its reissues. If the ratings provided by the Classification Committees are not satisfactory to shippers, the cases may be presented to the Interstate Commerce Commission.

Industrial and commercial traffic managers prepare and present requests for rate reductions to committees of carriers' representatives in much the same way that classification matters are placed before the Classification Committees. The procedure is informal, the discussions of the requests being made in round-table conferences. If the requests are not granted by the carriers, the matters are taken before the state regulatory commissions or the Interstate Commerce Commission.

Practice before the Interstate Commerce Commission

The courts of the United States have defined the Interstate Commerce Commission as a "quasi-judicial" body. This designation distinguishes the Commission from a court of law and the distinction is valid in more than one way. The Commission performs all the judicial functions of a court, except one, the execution of its judgments. These judgments are binding upon the parties, however, unless suspended, modified, or set aside by the order of a court of competent jurisdiction. There are other functions of the Commission, however, which are administrative in nature, and when the Commission acts in the establishment of rates or fares for the future, its work is legislative in character. Thus we can view the Commission as a body endowed with triple functioning powers, functioning as an administrative, a legislative, and a judicial body. The triple nature of the Commission's activities has resulted in the development of a semilegal system of procedure.

The nature of the issues presented before the Commission is not infrequently such that an attorney need not be employed; the issue may involve amounts of money that are so small that the complainant feels the expense of legal representation is prohibitive. Such cases may be presented before the Commission directly by the complainant without the services of an attorney-at-law. Other issues, however, are so important and the amounts involved so great, that expert advice is almost indispensable to the successful prosecution of the cases. In important cases the issues cannot be jeopardized by inappropriate pleadings or relevant testimony remaining undisclosed. There is considerable danger of just such contingencies in cases presented by men without legal training who attempt to testify as well as examine. The Commission has itself no authority to deny a witness the right of conducting the case, or an attorney the right to testify. However, the work of the two is distinct and the performing of both functions, in many instances, tends to confusion and the records of such cases often become needlessly involved and lengthened. The Commission is obliged to make its findings on the record of the case as it is conducted before the attorney examiner or division of the Commission. In case the controversy has not been brought to a clear issue, it may be obliged to deny the relief sought, when a clear-cut presentation of the case might have adduced weighty testimony which would have influenced the Commission to make a contrary finding. Too much emphasis, therefore, cannot be laid on the importance of careful observance of the rules of practice before the Commission and the careful preparation of the case along the lines prescribed by the best legal experience.

The original Act to Regulate Commerce of 1887 gave the Interstate Commerce Commission the power to determine its own rules of procedure, and in accordance with this

grant of authority it has issued, in pamphlet form, the "Rules of Practice before the Commission in Cases and Proceedings under the Act to Regulate Commerce."

Importance of the Commission's Work

The power of the Interstate Commerce Commission is very much more far-reaching than many persons realize. Many of the cases coming either formally or informally before the Commission involve directly only small amounts of money, but the decisions reached by the tribunal often form the bases for the determination of issues affecting many carriers and thousands of shippers throughout the United States. Revenues of the carriers to the extent of hundreds of thousands of dollars are often involved.

Larger cases, involving broad principles, naturally affect a wide circle of shipping interests and affect in considerable measure the revenues of all the carriers handling the traffic. The annual incomes of such carriers are affected favorably or adversely depending upon the result of the Commission's investigation. Such cases as the Rate Advance Cases of recent years involve substantially every carrier and virtually all shippers of freight. Hundreds of millions of dollars of freight revenues often hang in the balance of the Commission's judgment. The whole public, depending so absolutely upon the transportation facilities and upon the charges made for transportation services, are affected by the Commission's decisions in such cases, even though few fully appreciate the full significance. Another factor enhancing the importance of the Interstate Commerce Commission is the finality of its decisions when they are based upon subject matter within the Commission's jurisdiction and reached after a proper record has been taken. Findings of fact by the Commission are final though the law in the case may be reviewed.

Types of Proceedings before the Interstate Commerce Commission

The great variety of cases or proceedings brought before the Commission fall logically into two major groups; each of these in turn may be divided into a comparatively small number of subdivisions which are fairly comprehensive. The first of these major groups includes controversies of various sorts and the investigations of the Commission arising out of such disputes. These controversies include formal complaints, informal cases, suspension cases, and general investigations. The greater portion of controversial cases arises out of complaints involving either rates or services.

The second major classification of cases includes proceedings of a special nature, including applications by carriers for approval of security issues, applications for the permission of the Commission for carriers to retain, as officers or directors, persons who occupy similar positions with other carriers, applications for certificates of public convenience and necessity for extension of old lines or building of new ones, applications for permission for the abandonment of lines in operation, and applications for authorization to acquire or consolidate lines. This class of proceedings is conducted under the administrative authority of the Commission and the duty of the Commission is to determine the facts rather than to judge the merits of controversies. Many cases of this sort are bitterly contested by the parties directly and indirectly involved, as in the case of the Union Pacific consolidation and in the numerous cases of railroad abandonment before the Commission from time to time.

Informal Case Procedure

Informal cases are those which are decided by the Commission without formal complaint, hearing, or order. The

mutual consent of the parties is necessary to waive the requirement of formal procedure but many cases are handled in this manner so as to conserve time. The Commission has encouraged this type of procedure and its popularity is evidenced by the volume of cases handled in this manner annually. During the calendar year of 1923, the Commission received over seven thousand informal complaints. Many of them sought informal rulings upon questions of the right or liability of the carriers and the public under the provisions of regulatory statutes. Many of these were disposed of by informal rulings. The policy of the Commission is to make such disposition of informal complaints, whenever this form of action can be taken without prejudicing the rights of other parties. . Other complaints dealt with rate and fare refunds. Orders authorizing refunds were issued in twelve hundred cases involving three-quarters of a million dollars.

Informal complaints usually are instituted by a letter of complaint from a shipper or passenger who feels he has a grievance. This letter is sent to the Interstate Commerce Commission and the matter is referred by the Commission to the carrier of whom complaint has been made. The carrier is requested to make a statement in writing of its position in the matter, together with any additional facts not disclosed by the complainant's letter. If after reviewing the carrier's reply, the complaint appears to the Commission to lack merit, or if the carrier agrees to comply with the request made by the complaint, or if the matter may be disposed of in any other way mutually satisfactory to the carrier and the complainant, the Commission expresses an opinion concerning the matter. A letter is addressed to the parties involved expressing this opinion, signed by the Secretary of the Interstate Commerce Commission. If the informal complaint involves reparation payments and the carrier concedes the justice of the re-

quest, the Commission may permit the carrier to submit an application on the "special docket" for authority to pay the amount of reparation decided upon. The Commission investigates the propriety of each reparation claim and if the proceeding is found to be a bona fide request for the return of improperly collected charges, it may authorize the payment by the carrier of the reparation sought. The carriers may not, however, pay reparation without such authorization of the Commission.

If an informal complaint cannot be disposed of without a hearing, the complainant is notified to this effect by the Commission. He then has three courses open to him: (1) he may drop the matter, or (2) he may continue negotiations direct with the carriers, or (3) he may file formal complaint.

The running of the Statute of Limitations has been stayed by the filing of informal complaint, so the filing of formal complaint opens the case anew (*de novo*).

Formal Complaints

Formal complaints are those filed in accordance with the rules of the Interstate Commerce Commission as published in the "Rules of Practice." Any person may file such complaints even though the complainant has suffered no direct damage. As in the case of the informal docket, the formal docket is very crowded and has been so for some years. Formal cases have been filed since 1915 with the Commission as shown on page 395.

During the years of 1917 and 1918, fewer complaints were filed than for many years past, due to the operation of the roads by the Federal government. The administrative activities of the U. S. Railroad Administration removed many cases from the jurisdiction of the I.C.C. In 1919 an increase in the number of complaints inevitably followed as an aftermath of Federal control, and in later years even

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<i>Year</i>	<i>Number of Formal Cases Filed</i>
1915.....	964
1916.....	854
1917.....	651
1918.....	342
1919.....	838
1920.....	1,040
1921.....	1,487
1922.....	1,264
1923.....	1,160
1924.....	1,343

a greater flood of cases poured in upon the Commission, due to its widened administrative powers under the Transportation Act of 1920.

This flood of cases has clogged the docket of the Commission, for many of these formal cases are of great public importance, involving large sections of the country and millions of dollars of potential revenue. A formal complaint, therefore, once docketed, begins a long period of litigation and waiting. Each case is obliged to wait its turn and it takes usually nearly a year for the Commission to hear and decide a case of any importance on the formal docket. A decision of the Commission does not always terminate the case, for in some cases appeals are taken from the decision of the Commission to the courts for review, or the order of the Commission may open up new controversies between shippers or carriers in other sections or in allied matters affected by the decision. The Shreveport Case, for example, required eleven years to complete, the Transcontinental-Intermountain case has been before the Commission and courts for thirteen years. These delays are more than merely irritating; the situation complained of often remains operative, pending a decision, and continues to vex those affected. To avoid as much delay as possible the Commission pursues a policy of encouraging

the settlements of as many cases as possible between the shippers and carriers or through the channels of informal complaints or the shortened procedure outlined in a later section.

Presentation of Formal Complaints

The Commission specifies that formal complaints must be printed or typewritten and sufficient detail submitted, so that the Commission and the parties defendant may be completely advised as to the precise nature of the case. The names and addresses of the complainants and their attorney or attorneys, if any, must be stated in full, with the names and addresses of the parties defendant. Sufficient copies of the complaint must be furnished to enable the Commission to serve one copy to each defendant, and to retain three for the use of the Commission. If the complaint alleges specific violations of sections of the Act to Regulate Commerce, the facts alleged to constitute the violations must be enumerated in narrative form (see Fig. 63).

FIG. 63. COMPLAINT BEFORE THE INTERSTATE COMMERCE COMMISSION

.....	} (<i>Insert without abbreviation corporate title of carrier or carriers defendant.</i>)
v.	
The Railroad Company Railway Company	

The complaint of the above-named complainant- respectfully shows:

I. That (*complainant or complainants should here state nature and place of business, also whether a corporation, firm, or partnership, and if a firm or partnership the individual names of the parties composing the same*).

11. That the defendant- above-named is a/are common carrier- engaged in transportation of (passengers and) property wholly by railroad (or, partly by railroad and partly by water), between points in the State of and points in the

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State of, and such common carrier— is/are subject to the provisions of the interstate commerce act.

III. That (state in this and subsequent paragraphs to be numbered IV, V, etc., the matter or matters intended to be complained of, naming every rate, fare, charge, classification, regulation, or practice the lawfulness of which is challenged, and also, if practicable, each point of origin and point of destination between which the rates, etc., complained of are applied. Where it is impracticable to designate each point, defined territorial or rate groups and typical points should be designated. Whenever practicable tariff references should be given. See Rule III.

Where unlawful discrimination is charged, the facts constituting the basis of the charge should be clearly stated; that is, if the unlawful discrimination be under section 2, the person or persons claimed to be favored and the person or persons claimed to be injured should be named, and the kind of service and kind of traffic, together with the claimed similarity circumstances and conditions of transportation should be set forth. See Rule III(L). If the discrimination be under section 3, the particular person, company, firm, corporation, locality, or traffic claimed to be accorded undue or unreasonable preference or advantage, or subjected to undue or unreasonable prejudice or disadvantage, should be stated. See Rule III(M). If the discrimination be under section 4, the particular provision of the section claimed to be violated—that is, whether the long-and-short-haul provision or the aggregate of intermediate rates provision—as well as the facts constituting such violation, should be stated. See Rule III(O).)

X. That by reason of the facts stated in the foregoing paragraphs complainant— has/have been subjected to the payment of rates (fares or charges, etc.) for transportation which were when exacted and still are (1) unjust and unreasonable in violation of section 1 of the interstate commerce act, and/or (2) unjustly discriminatory in violation of section, and/or (3) unduly preferential or prejudicial in violation of section 3, and/or (4) in violation of the long-and-short-haul (or, aggregate of intermediate rates) provision of section 4 thereof. (Use one or more of the allegations numbered 1, 2, 3, 4, according to the acts as intended to be charged.) That complainant has/have been injured thereby to his/their damage in the sum of dollars.

Wherefore complainant- pray- that defendant- may be (severally) required to answer the charges herein; that after due hearing and investigation an order be made commanding said defendant- (and each of them) to cease and desist from the aforesaid violations of said act, and establish and put in force and apply in future of the transportation of between the origin and destination points named in paragraph hereof, in lieu of the rates (fares, or charges, etc.) named in said paragraph, such other rates (fares, or charges, etc.) as the commission may deem reasonable and just (and also pay complainant- by way of reparation for the unlawful charges hereinbefore alleged the sum of, or such other sum as, in view of the evidence to be adduced herein, the commission shall determine that complainant- is/are entitled to as an award of damages under the provisions of said act for violation thereof), and that such other and further order or orders be made as the commission may consider proper and in the premises.

Dated at, 19....

.....
(Complainant's Signature)

.....
(Office and P. O. Address)

.....
(Attorney's Signature)

.....
(Office and P. O. Address)

The Commission examines the complaint to check its conformity with the "Rules of Practice." If the document is in good order, copies are served by the Commission upon the parties defendant. Delivery to an agent, designated by each carrier as its special agent in Washington to receive such service, constitutes valid notice to each defendant. The carriers are required to appoint such representatives and if they fail to do so, the Commission's rules provide that the posting of a notice in the office of the Secretary of the Commission is considered as legal notice. The agent

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transmits the copy he has had served upon him to his principal for such action as the defense may require.

Twenty days are allowed the defendants to make a formal answer (see Fig. 64), except for defendants located in the Far West. Such parties are allowed to file answers within thirty days. If the carriers defendant fail to file an answer within the prescribed time, they are not barred from appearing at the hearing or from otherwise conducting a defense. They may participate as fully in the case as though a formal answer had been duly filed. In this respect the procedure of the Commission differs radically from ordinary court procedure. Courts of law under such circumstances refuse delinquent defendants the right to participate, and enter a default judgment in favor of the complainants.

FIG. 64. ANSWER

v.

The Railroad Company } Docket No.

The above-named defendant-, for answer to the complaint in this proceeding, respectfully state-:

I. (*Here follow appropriate and responsive admissions, denials and averments, answering the complaint paragraph.*)

Wherefore defendant- pray- that the complaint in this proceeding be dismissed.

Dated at....., 19...

The Railroad Company,
By

(*Title of Officer*)

.....
(*Office and P. O. Address*)

Hearings

After the formal replies of the defendants have been received or the time has expired within which answers might

have been filed, the Commission sets a time and place for the hearings and assigns one of its attorney-examiners to conduct the hearing. The examiners are employees of the Commission, retained for this specific purpose as provided for by the Act to Regulate Commerce. They have no power to make decisions but are permitted to rule upon the admissibility of evidence.

The place of hearing is set, usually, at a place agreeable to the parties complaining, so that complainants may have the opportunity to be present and present testimony with as little inconvenience as possible.

The issues which have been raised are stated at the opening of the hearing by the examiner and the parties must agree upon the statement as described or agree upon the modifications suggested. Unless the examiner directs otherwise, the complaining parties or their attorneys first state their case and produce their testimony. The witnesses testify under oath and are subject to cross-examination as in courts of law. The defendants are then called upon for their evidence, which is followed by the rebuttal of the complainants. Oral argument may be conducted before the examiner at the close of the hearing of the evidence, if the parties desire. A date is set by the examiner for the filing of briefs by all parties wishing to do so. The briefs may review the evidence and advance the arguments deemed pertinent to the case. The form of the briefs is prescribed by the Commission and copies must be served upon each of the opposing parties and twenty copies provided for the use of the Commission. Any one entitled to complain to the Commission may petition for leave to intervene pending the opening of the proceeding or at the time it is called for hearing, but not after, except for good cause shown. The petition (see Fig. 65) sets forth the grounds of the proposed intervention, the position, and interest of the petitioner. Leave will not be granted except

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on "allegations reasonably pertinent to the issues and which do not unduly broaden them." ("Rules of Practice," II (L).) The admitted petitioner or intervener becomes a party to the proceeding.

FIG. 65. PETITION FOR LEAVE TO INTERVENE

..... }
v. } Docket No.

Come— now your petitioner—, , and respectfully represent— that he has (they have) an interest in the matters in controversy in the above-entitled proceeding and desire— to intervene in and become a party (parties) to said proceeding, and for grounds of the proposed intervention say:

I. That (*petitioner or petitioners should here state nature and place of business, and whether a corporation, firm, or partnership, etc., as in Fig. 63*).

II. (*Petitioner or petitioners should here set out specifically his (their) position and interest in the above-entitled proceeding in accordance with Rule II(E).*)

Wherefore said pray— leave to intervene and be treated as a party (parties) hereto with the right to have notice of and appear at the taking of testimony, produce and cross-examine witnesses, and be heard in person or by counsel upon brief and at the oral argument, if oral argument is granted.

Dated at, 19....

.....
(*Petitioner's Signature*)
.....
(*Office and P. O. Address*)
.....
(*Attorney's Signature*)
.....
(*Office and P. O. Address*)

Examiner's Proposed Report

Subsequent to the filing of the briefs, the proposed report of the examiner is served upon all parties who regis-

FIG. 66. PETITION FOR REHEARING OR REARGUMENT

If oral argument is desired, a date is set for hearing, usually in Washington, and the parties are advised. They may then submit requests for time allotments. Parties are heard in person or are represented by attorneys, and the

time available for hearing the argument is divided among the persons testifying. At the conclusion of the argument, the case is taken under consideration by the Commission. If no request is made for oral argument the case goes to the Commission immediately upon the conclusion of the period within which the parties are permitted to file exceptions to the proposed report of the examiner.

In formal complaints, the length of time required for the Commission to determine the case depends upon the importance and difficulty of the issues involved. No time limit is set upon the Commission's deliberations; a decision may be reached in a few weeks or it may take several months. The decision is announced by serving copies of the opinion and order of the Commission in the case upon the service agents of the carriers and by mailing copies to other interested parties. Parties dissatisfied with the findings may apply to the Commission for rehearing (see Fig. 66), setting forth the particulars upon which they base the request, or they may appeal the Commission's decision in a suit in a Federal court having jurisdiction in the matter.

Suspension Cases

In proceedings upon cases involving tariffs suspended from application pending a hearing by the Commission, the Rules of Practice are similar to those applicable in formal complaint cases, except that the burden of proof rests upon the carriers publishing the rates of which complaint is made. The carriers open the case and present evidence in support of the changed rates. The suspension period is limited by the act to a preliminary period of 120 days, with a further period of thirty days, after which the rates go into effect automatically, provided no decision has been reached by the Commission.

Such cases are expedited so as to permit a decision to be reached before the suspension period expires.

Investigations

General investigations of the Commission usually arouse widespread public interest, as general questions of rates, service, and management of great national importance are involved. These investigations arise in a number of ways: (1) by petition of an interested party, (2) by request of Congress, or (3) on motion of the Commission itself.

These cases usually consume a considerable amount of time. Voluminous testimony is often taken and many briefs of interveners filed. Lengthy oral argument is heard before the full Commission and a number of conferences held before the report of the Commission is released. During recent years a number of investigations of the Commission have been given widespread publicity, including the investigations of the bill of lading, coal car distribution, transportation of inflammables, automatic train control, conflict of state and interstate rates, railway consolidations, mail payments, congestion, boundaries of Standard Time Zones, and the so-called "Ex Parte 74" investigation involving increased rates in 1920.

Administrative Responsibilities of the Commission

Various bureaus of the Commission are equipped to handle the numerous forms of administrative work intrusted to the Commission by the Act to Regulate Commerce and its amendments. Applications for authority to build or abandon lines, issue stocks or bonds, finance equipment, or similar applications are submitted to the proper bureau in the form prescribed by the Commission. If the applications are opposed by any interested persons or states, notice is sent to the opponents and the right to be heard is extended them. An informal procedure is used

PROCEDURE BEFORE TRAFFIC COMMITTEES 405

in such cases and the proceedings are of an *ex parte* nature. The Commission does not function as a judicial body but as an administrative organization or department. The Commission among its other administrative duties is charged with the investigation of matters which involve criminal cases, brought to its attention by the Attorney-General of the United States.

The Commission's Shortened Procedure

In order to simplify, shorten, and make less expensive the procedure upon complaints filed with the Interstate Commerce Commission, that body has experimented with a new method of handling the simpler types of formal cases. This so-called "shortened procedure" dispenses with the usual method of holding hearings before a commissioner or an examiner, and substituting instead sworn statements of fact.

The complaint is filed in the regular manner. Copies are served upon the defendants with requirement that the defendant or defendants shall satisfy it or file answer within the time prescribed. Complainants are asked to submit a memorandum within thirty days, setting forth the evidence which would ordinarily be introduced if the case were orally heard. Argument ordinarily made in its brief is filed at the same time. At the time complainants are asked for the memorandum, defendants are requested to advise within fifteen days whether or not they agree to the case being handled in the shortened form suggested.

After the complainants' memorandum has been received and after defendants have agreed to handle the case as suggested, the defendants are asked by the Commission to submit their reply memoranda of fact and argument within thirty days. At any time within fifteen days from the date on which reply memorandum is filed, the complainant may, if it wishes, submit rebuttal memorandum. The facts

stated are sworn to in these memoranda by those having knowledge of the facts.

When the respective memoranda have been filed, the case is assigned to an attorney-examiner. The examiner studies them as he would a formal record. A proposed report is then prepared. At any time up to the date when this report is issued by the Commission, the parties may request the regular formal hearing upon the whole complaint or upon certain features of it.

Following the service of the examiner's proposed report, the procedure is the same as if the case had been formally heard; that is, printed exceptions to the report may be filed, as provided by the "Rules of Practice" of the Commission.

Oral argument may be had upon seasonable request and the decision of the Commission is subject to petition for rehearing the same as if the issues had been decided upon a record made at a formal hearing.

The Interstate Commerce Commission reports the following cases handled in this fashion in a typical year. Formal complaints are frequently docketed together because of similarity of issues, and some of these cases embrace more than one complaint.

Number of Cases:

As to which this procedure was suggested, either by the Commission or by the parties.....	227
In which regular oral hearing was requested.....	31
In which agreement was subsequently reached by the parties, making further proceedings unnecessary..	20
Subsequently dismissed on complainant's motion....	1
In which decisions have been reached.....	6
In which all the memoranda have been submitted....	48
In which petitions for rehearing have been filed.....	1
In various stages of progress.....	112
In which agreement between the parties is pending...	6
Held pending decisions in other cases.....	9

The Commission reports that:

A substantial number of attorneys and traffic officials practicing before us have stated that they believe our experiment is a step in the right direction and that many of our formal cases can doubtless with the consent of the parties be disposed of in the manner suggested. Approximately a dozen parties, representing both shippers and carriers, have asked that their respective cases be tried under the new method.

For two representative months it has been calculated that the cost of sending an examiner away from Washington to hear a formal case ranges from 69 cents to \$3.50 per page of transcript of testimony, depending upon the distance the examiner must travel, the number of cases to be heard at the same time and place, the salary of the examiner and other factors. This calculation showed that the average cost per page to us was 97 cents. An estimate based upon this calculation, and applied to the size of the records which might reasonably be expected if the cases handled under the new method had been heard in the regular manner, indicates that the Government thus far has saved approximately \$75.00 on each case. We have made no estimate of the savings to the parties in these cases.

While all requests for extensions of time within which to file memoranda were granted and no memorandum was rejected because overdue, even though some were six months late, the average time consumed in making up the record was approximately 60 days less than the average for similar cases handled in the regular formal method.¹

The advantages of such a plan are obvious. The docket of the Commission is constantly crowded and the speeding of the hearings made possible by this device is of incalculable benefit. The Commission is relieved to some extent and the expenses attendant upon such hearings under the old plan may be materially reduced.

The chief benefactors are those having cases to be tried before the Commission. Prompt attention to complaints, less delay in arriving at decisions and less frequent full formal hearings will result in shorter proceedings and lower

¹ Annual Report, I. C. C., 1923.

Claim No. — of Richard Roe under the decision of the Interstate Commerce Commission in Docket No. —.

Date of shipment.	Date of delivery or delivery.	Date charges were paid.	Car initials.	Car No.	Origin.	Desti- nation.	Route.	Commodity.	Weight.	As charged.		Should be—		Reparation on basis of the Com- mission's decision.
										Rate.	Amount.	Rate.	Amount.	
Oct. 7, 1918.....	Oct. 20, 1918.....	Oct. 25, 1918.....	N. P.....	41585	Pittsburgh, Pa.....	Dallas, Tex.....	B. & O., M. K. & T., A. & T. of Tex.....	Jelly glasses.....	30,000	\$1.25	\$375.00	\$1.15	\$345.00	\$37.00
Oct. 10, 1918.....	Oct. 22, 1918.....	Oct. 23, 1918.....	I. C.....	6789	do.....	do.....	do.....	do.....	33,000	1.25	412.50	1.15	379.50	33.00
Dec. 10, 1918.....	Dec. 24, 1918.....	Dec. 24, 1918.....	C. & E. L.	60283	do.....	do.....	do.....	do.....	27,400	1.25	342.50	1.15	271.00	71.50
Mar. 25, 1919.....	Apr. 12, 1919.....	Apr. 13, 1919.....	U. P.....	10248	do.....	do.....	do.....	do.....	31,200	1.25	\$390.00	1.15	\$358.80	31.20
Total.....											1,508.75		1,405.72	113.03

The undersigned hereby certifies that this statement has been checked against the records of this company and found correct.
MARCH 30, 1920.

X. Y. Z. Ry. Co.,

Collecting Carrier Defendant.

By JOHN SMITH, Auditor.

Concurred in.

A. B. C. Ry. Co., Defendant,

By WILLIAM JONES, Auditor.

RICHARD ROE, Claimant.

By JOHN DOE, Attorney.

— STREET, CHICAGO, ILL., March 15, 1920.

* If not a defendant, strike out word "defendant."

* For concuring certificate in case collecting carrier is not a defendant.

FIG. 67. FORM FOR COMPLAINT TO THE INTERSTATE COMMERCE COMMISSION

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costs of prosecuting and defending cases before the Commission.

This survey of procedure before the Interstate Commerce Commission indicates the broad field of the Commission's activities and the various types of proceedings conducted before it. The Commission's policy of informality in proceedings, whenever possible, has resulted in avoiding the traditional rules of court procedure and has erected in their stead a highly technical type of practice. The provisions of the statutes under which the Commission functions and an intimate knowledge of the economic factors underlying the development of American railroads and commerce are necessary prerequisites to successful Commission practice.

CHAPTER XVIII

COÖPERATION IN THE TRAFFIC FIELD

Extent and Nature of Coöperation among Traffic Managers

Much of the important constructive work performed by industrial and commercial traffic managers is accomplished by the concerted action of several or many traffic men acting in unison to achieve some result of value to all members of the group. A large number of the cases of importance instituted before the Interstate Commerce Commission and the various state regulatory commissions are prosecuted by groups of industrial and commercial traffic representatives, acting either as members of a permanently associated group or as members of an informal alliance banded together to achieve the particular result sought.

It is customary also for traffic managers, who are interested in any particular case before the Commission, to petition the Commission for leave to intervene in the case so as to lend their assistance to the petitioner in the preparation and presentation of the case as well as to impress upon the Commission the fact that other industrial and commercial concerns are sufficiently interested in the case to become parties to the proceedings. The decision reached by the Commission affects all interested shippers and consignees, so that few important cases are investigated without interveners appearing to be heard in the matter.

Coöperation of this sort is a more or less spontaneous affair which usually is disrupted as soon as the matter of

mutual interest is finally disposed of by the Commission or courts.

More permanent forms of coöperation are to be found in the traffic field. Trade associations with permanent traffic committees and departments on the *qui vive* to protect the traffic and transportation interests of their members are to be found in growing numbers and increasing importance in many lines of business and in many sections of the United States. Chambers of commerce have similar committees and bureaus attending to the transportation interests of members. Such chambers are to be found in virtually every city of importance, and state, national, and international chambers of commerce are to be found functioning to advance the general transportation and business interests of the members in the territory served by the organization. Traffic managers of member companies are often appointed to the transportation and allied committees of the chambers so that the opinion of technical traffic men upon the transportation problems confronting the district may be focused through the chambers of commerce representing the business interests of the communities or states. Matters of rate adjustments, service, and transportation conditions affecting all within the community are discussed and appropriate action is taken through the transportation committee or bureau of the chamber so that adjustments advantageous to all the members may be obtained. Action of this sort varies from the presentation of the shippers' point of view in an informal manner by the commissioner of transportation or general secretary or committee representative to the attention of officials of the carriers, to the preparation and presentation of formal and informal complaints to the Interstate Commerce Commission or state regulatory commissions, and to the entering of suits seeking relief in the courts. Coöperative action of this sort is described more fully in Chapter XIV and need not be

repeated here except to distinguish it from coöperation of a slightly different sort to be discussed later. Group action through the media of trade associations and chambers of commerce and similar commercial bodies is action of interest to industries and commercial houses and not, strictly speaking, coöperative action by traffic men acting as technical men. The services of traffic men are used, it is true, in obtaining the results desired, but the trade associations and chambers of commerce represent the employers as business concerns and not the traffic managers of the businesses as technical men. Associations of the latter sort will be discussed presently.

The National Industrial Traffic League

The National Industrial Traffic League, or N.I.T. League as it is familiarly known, is the preëminent national organization of traffic men. Membership is confined to actual shippers of freight taking out bills of lading in their own names and to industrial and commercial organizations and associations representing such shippers. Memberships are held in the names of the concerns and dues are payable by the member companies or associations, although the traffic managers of the organizations are the official representatives of their respective companies or associations in the League.

Many of the leading industrial and commercial companies, trade associations, and chambers of commerce are represented in the League by their respective traffic managers, giving the body a highly representative character. Shippers of all sorts of commodities with plants and markets in virtually all parts of the United States are represented so that the deliberations and actions of the League are apt to reflect the consensus of the experts' opinions on transportation problems throughout the United States. No other shippers' organization has so representative a

membership or so broad an industrial and commercial outlook. The carriers and the Interstate Commerce Commission have come to recognize this fact and frequently seek the opinion of the League upon the involved transportation problems confronting them. Few matters of any considerable consequence are raised in the field of transportation without the League's investigating the matter thoroughly and expressing an opinion. Many matters of transcendent importance to the transportation interests of the country have been referred by the carriers and the Interstate Commerce Commission to the League before definite action has been taken. A noteworthy example of this was the action taken by the American Railway Association, representing the carriers, and the Interstate Commerce Commission, representing the Federal government, in working out the proposed changes in the national car demurrage rules in collaboration with the National Industrial Traffic League, the representatives of the shipping public. Joint conferences were held of the committees of the American Railway Association and of the National Industrial Traffic League, which were attended by the Chief of the Bureau of Informal Cases of the Interstate Commerce Commission, who was in charge of the Commission's demurrage affairs. A joint stipulation of the League and the Railway Association was filed with the Commission, outlining their respective views, and briefs were filed with the I.C.C. by the League amplifying its views in connection with parts of the rules on which the League and the Railway Association could not agree.

The action of the League's committee was submitted to the members for approval at the regular meetings and the members kept advised as to developments by means of circulars issued by the Executive Secretary of the League. Individual members communicated their views to the Chairman of the League Committee, sending copies of the letters

to the Executive Secretary, so that the League could be thoroughly posted as to how the proposed changes affected the members and the policy of the organization could be formulated with the best interests of all the members in mind.¹

Although the League is the zealous guardian of the interests of shippers, the moderation and good, sound, broad-mindedness of its policy has won for it a reputation of an able and constructive contributor in the field of transportation work. Many of the traffic managers who are active in League affairs have had valuable experience in the employ of the rail and water carriers as well as experience as users of transportation services, so that the deliberations and actions of the League are tempered by expert knowledge reflecting an appreciation of transportation problems from the carriers' as well as the shippers' viewpoints.

Organization of the National Industrial Traffic League

More than a thousand industrial and commercial companies, trade associations, chambers of commerce, boards of trade, and similar commercial associations are included in the membership of the League. The League claims to represent in all more than 300,000 shippers of freight.² Each organization is represented by the traffic manager or representative of similar title in the League. Annual membership dues are paid by the member companies or associations according to their size and importance. One hundred dollars per annum is the normal rate of dues but smaller amounts may be assessed as determined by the executive committee. Just enough is sought to be raised

¹ For further details of this case, see *Traffic World*, Vol. XXXV, No. 1, p. 27.

² Testimony of Luther M. Walter, attorney and counsel, National Industrial Traffic League, in J. C. Davis, Director General of Railroads, Agent, *v. E. I. DuPont de Nemours & Co.*, U. S. Circuit Court of Appeals, 8th District, No. 6138.

by the assessment of dues to pay the operating expenses of the League organization. All members are eligible to vote for officers of the League.

A nominating committee submits annually to the members at the annual meeting a report embodying the names of the officers and directors nominated for the ensuing year.

A president, a general vice president, eight regional vice presidents, a treasurer, and thirty directors are elected after their names have been submitted by the nominating committee, by vote of the members at the meeting. The directors then select two of their number as the chairman and vice chairman of the board of directors and elect an executive committee of fifteen members. The chairmen of the standing committees of the League are appointed by the president and are members *ex officio* of the executive committee.

Special committees are appointed by the president from time to time to investigate and report upon special problems of interest to the League.

An executive secretary is elected as the permanent administrative head of the League. This officer together with an assistant treasurer are the only officers devoting all of their time to the affairs of the organization, the other positions being filled by men devoting part of their time to League duties without compensation.

The organization of the League may be more clearly visualized in the chart shown in Figure 68.

The president of the League presides at the general meetings of the members and in his absence the general vice president acts in his stead. These officers are the elected executive heads of the organization and perform the usual functions of such offices. The regional vice presidents attend to membership problems within their respective territories and as chairmen and members of important stand-

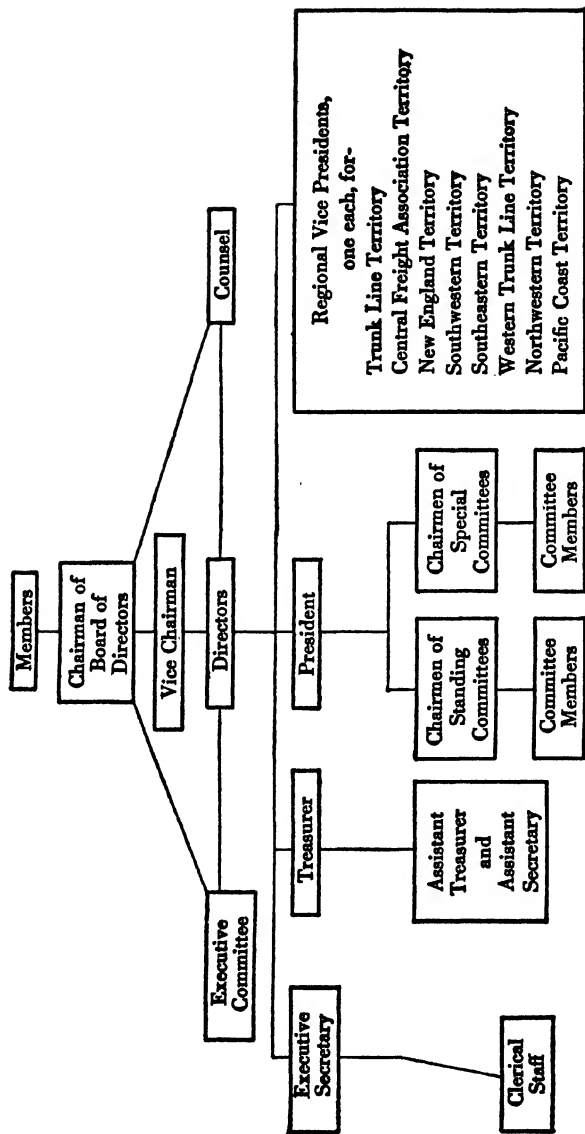


Fig. 68. ORGANIZATION OF THE NATIONAL INDUSTRIAL TRAFFIC LEAGUE

ing and special committees assist in the performance of much of the constructive work of the League. The executive committee holds meetings preceding the meetings of the League, in which the important problems are discussed and prepared for presentation to the membership. Questions relating to membership, resignations, finances, policy, new developments in the field of transportation, including court decisions, orders of the Interstate Commerce Commission, actions of the carriers with respect to rates or service, are discussed with the view of informing the members of important developments and of formulating the policy of the League upon such matters.

The treasurer performs the customary duties of taking custody of the League's funds and of disbursing these funds for the benefit of the League. In this work he is assisted by the assistant treasurer, a salaried official devoting his entire time to the work of the League.

An executive secretary attends to the supervision of the work of the permanent administrative staff of the organization. This officer prepares and presents financial statements of the League's affairs to the executive committee, attends to the collection of dues, obtains information of interest to the League by keeping in touch with the carriers, the Interstate Commerce Commission, the various state commissions, the members of the League and the press. He is the official observer of the organization who gathers and disseminates information so that the members of the League may have the benefit of the constant services of a trained traffic man familiar with all developments of importance in the field of transportation. The fruits of his observation are passed along to members through the executive committee in the form of circulars, issued as required by the executive secretary and sent to all members of the League.

A glance at the docket of a typical meeting of the League

indicates the scope of its activities. The following order of business was docketed for such a meeting in 1924.

1. Report of Executive Committee
2. Bill of Lading Committee
3. Car Demurrage and Storage Committee
4. Classification Committee
5. Diversion and Reconsignment Committee
6. Export and Import Traffic Committee
7. Express and Parcels Post Committee
8. Freight Claims Committee
9. Highway Transportation Committee
10. Inland Waterways Committee
11. Legislation Committee
12. Membership Committee
13. Passenger Traffic Committee
14. Rate Construction and Tariffs Committee
15. Transportation Instrumentalities and Car Service Committee
16. Weighing Committee
17. Special Committee on Coal Claim Rules
18. Special Committee on Embargo Rules and Regulations
19. Special Committee to Coöperate with the Railroad Traffic Executives
20. Special Committee on Allowances to Industrial Roads and Charges for Spotting
21. Special Committee on Revision of League's Constitution
22. Special Committee on Claims Prevention
23. Special Committee on Merchant Marine
24. Special Committee on Telegraph Liability
25. New Business*

Meetings are held at least annually. A regular annual meeting is held in November of each year at such time and place as the executive committee may decide. Special meetings may be called by the executive committee from time to time and fifteen days notice of such meetings is given to the members. Meetings of the executive commit-

* Docket, Annual Meeting, N. I. T. League, New York, November 21, 1924.

tee are held from time to time upon the call of the chairman or the written request of ten members. The board of directors meets annually following its election or at the close of the annual meeting of the members. This body also convenes in special meetings upon the call of the chairman of the board or upon written request of ten members.

The purpose and object of the League can be no better summed up than in the words of the preamble and Article II of the League's Constitution. The preamble reads as follows:

Believing the requirements of commerce are best served by a thorough understanding upon the part of railways and the shipping public of each other's needs, this organization stands for and will undertake, through conference, publicity and other proper means, to promote such knowledge of transportation affairs as will aid in effecting such result; to assist in the enactment of clearly defined laws governing interstate traffic and the interchange of views regarding intrastate legislation which does or may affect interstate commerce, that the public may be relieved of all uncertainty as to its relations with the carriers, also, to acquaint the regularly established tribunals of the needs of the shipping interests and the effect on commerce of rulings, decisions and practices, either fixed or to be determined by such bodies.*

Article II of the Constitution provides that:

The object of this League shall be to promote adequate national transportation, and to this end to interchange ideas and information concerning traffic and transportation matters; to coöperate with the Interstate Commerce Commission and other regulatory bodies, both federal and state, and the transportation companies, in developing a thorough understanding by the public, the carriers and the national and state governments, of the transportation requirements of industry; to obtain legislation that will be helpful to commerce, and to secure the modification of laws, rulings and regulations that may be found harmful, and to promote cordial relations between shippers and carriers. The activi-

*Preamble, Constitution and By-Laws, N. I. T. League.

ties of the League shall be confined to matters of national interest."

Local Industrial and Commercial Traffic Associations

In several large cities and in a number of the smaller but important transportation and industrial centers, the industrial and commercial traffic managers have associations for the interchange of ideas upon transportation subjects and for joint action of the members in presenting matters of common interest to the carriers, the state commissions, and the Interstate Commerce Commission.

Traffic and transportation problems are discussed in open meetings and matters of interest are referred to committees for investigation and action in the name of the association. Coöperation of this sort tends to keep all industrial and commercial traffic men informed as to important developments in transportation in the particular territory in which the association is located and, in a more general way, in the whole country, for problems confronting one large commercial or industrial center often affect other localities as well. Without the contact with other local shippers' representatives the traffic manager cannot hope to keep closely in touch with transportation matters, many of which may vitally affect his own business, and without the co-operation of other technical workers in the field the burden of the individual traffic man is harder to support. The interests of so many industries are identical from a transportation standpoint that the united action of their traffic managers tends to strengthen the position of all. The old adage, "In union there is strength," applies in an economic as well as in a political sense.

Local industrial and commercial traffic associations differ somewhat in purpose as well as in organization from local chambers of commerce, boards of trade, commercial ex-

¹ *Ibid.*, Art. II.

changes, and similar bodies. These latter organizations are associations of business houses and industries while the traffic associations are organizations of the traffic representatives of the industrial and commercial establishments. Chambers of commerce and other such bodies speak for the establishments while the commercial and industrial traffic associations speak for the technical men who represent the traffic and transportation interests of the concerns in the district. This distinction, while on the whole a valid one, is somewhat finely drawn with the result that there is, in some cases, a duplication of the work performed by the transportation committee or bureau of chambers of commerce and other commercial bodies and that done by the association of traffic men, representing many industries and commercial houses which are included in the membership of the commercial bodies. Such confusion and duplication, happily, is the exception rather than the rule. Usually the work of one organization supplements that done by another.

Among the prominent associations of this character are the Chicago Shippers' Conference Association, the Industrial Traffic Club of the Niagara Frontier, located at Buffalo, New York, the Shippers' Conference of Greater New York, and the Commercial Traffic Managers of Philadelphia. The latter organization is a "voluntary one whose membership is composed of the traffic managers representing 135 of the largest manufacturing and industrial firms located in the Philadelphia district, interested in the promotion and protection of the transportation interests of its members."⁶ Its mode of organization, functions, and purposes may safely be regarded as typical of the more fully developed commercial and industrial traffic managers' associations of the technical variety.

⁶ From the *Commercial Traffic Managers v. the B. & O. R. R. Co., et al.*, I. C. C. Docket 16047, p. 47.

The membership of the association is confined to traffic directors, managers, or other officials of industries actually controlling the handling of traffic, or traffic representatives of recognized trade bodies serving the public interest. Membership is limited by the constitution to 150 members. Several members may be elected from one industry but only one member may vote for each concern. Officers are elected for an annual term and consist of a president, one vice president, a secretary, a treasurer, and an executive committee, consisting of the officers and five directors, members at large. Vacancies in the officerships are filled for the unexpired term by the executive committee. All the officers serve gratuitously except the secretary, who is paid a nominal annual salary.⁷

The president is charged with the duty of presiding over all regular or special meetings, appointing all standing or special committees, receiving all matters presented for consideration by the association and making assignment of each matter to the proper committee or special assignment in case the subject is not covered by standing committees, and approving all drafts on the treasurer for regularly authorized expenditures.

The vice president presides and fulfills the duties of the office of the president in the absence of the latter.

The secretary is charged with the responsibility of keeping the minutes of all regular and special meetings of the association and of the executive committee, conducting all correspondence in the name of the association, issuing calls for meetings and notices of changes in constitution and by-laws, notifying members of their appointment to committees, and the collection of all initiation fees and assessments. Nominal initiation fees are collected, and although no annual dues are assessed, the executive committee is

⁷ Constitution and By-Laws, Commercial Traffic Managers of Philadelphia.

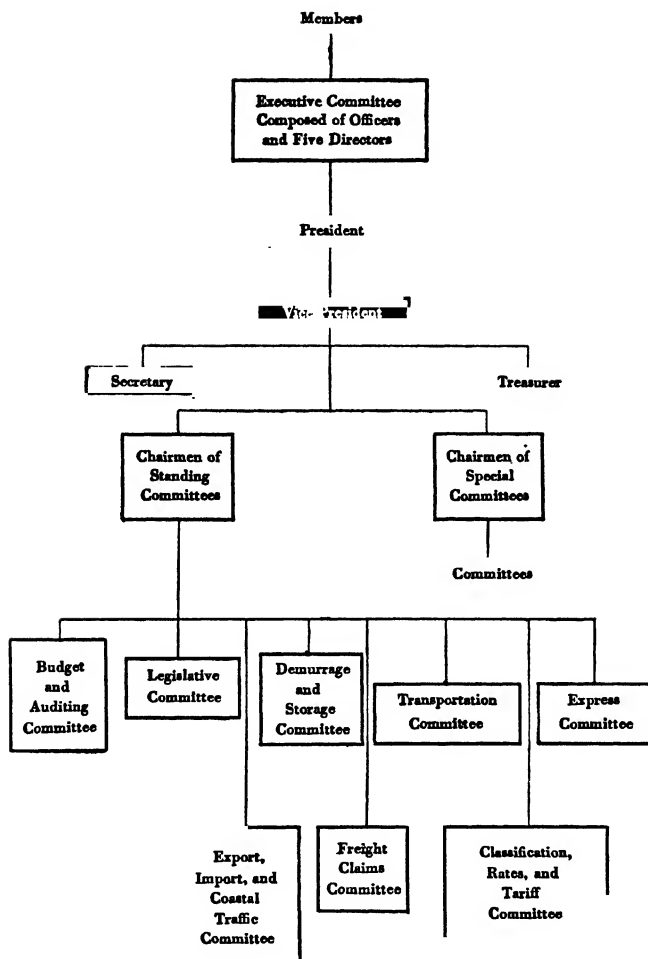


FIG. 69. ORGANIZATION OF THE COMMERCIAL TRAFFIC MANAGERS OF PHILADELPHIA

authorized to make assessments, from time to time, to meet incidental expenses for clerical labor, stationery, postage, and office and traveling expenses, which the executive committee may authorize. Such assessments are apportioned among the members as the executive committee may determine.

The treasurer receives all initiation fees and assessments collected by the secretary and deposits the proceeds in a bank subject to his check for the payment of authorized expenses.

The executive committee conducts all the detailed business of the association under authority conferred by the organization. It acts upon applications for membership received by the secretary and handles all matters referred to it at meetings of the association. The time and place of regular and special meetings are designated by the executive committee and the call issued by the secretary. Regular meetings are held monthly throughout the year except during the summer months.

A diagram of the organization of this association, shown in Figure 69 indicates the simplicity of the organization.

The constitution of this association sets forth its object to interchange ideas concerning traffic matters; to coöperate with the Interstate Commerce Commission, the State Public Service Commission (of Pennsylvania) and transportation companies in promoting and securing a better understanding by the shipping public of the needs of the traffic world; to secure necessary legislation and the adjustment of rates, regulations, rules and practices when such are considered detrimental to the free interchange of commerce and to promote and protect the transportation interests of its members. The organization, as a body, will only handle matters which are general in character and which affect its members. . . .

Members are permitted to present any individual traffic problem at any regular meeting and to request advice as to the course of procedure necessary to accomplish adjustment.*

* *Ibid.*, Art. II.

Founded in 1913, the Commercial Traffic Managers of Philadelphia have maintained a steady pace of growth in size and influence. The association claims to control through its members an annual freight movement of at least 700,000 cars of freight, a total tonnage of 25,000,000 tons yielding the carriers \$100,000,000 of revenue annually.*

Regional Shippers' Advisory Boards

During the year 1923, the American Railway Association through its Car Service Division organized a number of Regional Shippers' Advisory Boards composed of representatives of the leading shipping concerns of the districts in which the boards are located. Ten such boards have already been constituted and ultimately boards are to be set up in all sections of the United States.

The Northwestern Regional Advisory Board with headquarters in Minneapolis, Minnesota, covers the states of North and South Dakota, Minnesota, Montana, and northern Wisconsin.

The Central Western Board, with headquarters at Omaha, Nebraska, has jurisdiction over the states of Nebraska, Colorado, Wyoming, Utah, and Idaho.

The Southeastern Board attends to affairs in Alabama, Georgia, Florida, North Carolina, South Carolina, and Mississippi. Headquarters of this board are maintained at Birmingham, Alabama.

The Southwestern Board covers Texas, Louisiana, part of Arkansas, New Mexico, and part of Oklahoma, with headquarters at Dallas, Texas.

The Trans-Missouri-Kansas Board governs Missouri, Kansas, and portions of Arkansas, Oklahoma, and Illinois.

* Statement, T. Noel Butler, Secretary, Commercial Traffic Managers of Philadelphia.

Headquarters of this board are maintained at St. Louis, Missouri.

The Great Lakes District Board attends to the affairs for northern Ohio and Indiana, the southern peninsula of Michigan, northwestern Pennsylvania, and western New York. Headquarters are at Detroit, Michigan.

The Ohio Valley Board covers southern Ohio, southern Indiana, Kentucky, and the western portion of West Virginia, with headquarters at Cincinnati, Ohio.

The Middle Atlantic States Board, with headquarters at New York City, covers parts of New York, Pennsylvania, Maryland, New Jersey, Delaware, and the District of Columbia.

The New England Board, with headquarters at Boston, Massachusetts, governs the New England states and one at Pittsburgh, Pennsylvania, is contemplated to attend to affairs in the district not embraced within the Middle Atlantic States and Ohio Valley Boards.

All of these organizations have been created with one end in view: to form a common meeting ground between shippers and railroads for the better understanding of transportation questions; to adjust, informally, car difficulties which may arise between carrier and shipper and to give the shipping public a direct voice in the activities of the Car Service Division of the American Railway Association on all matters of mutual concern.

Donald D. Conn, Manager of the Public Relations Section, Car Service Division of the American Railway Association, at the first regular meeting of the Ohio Valley Shippers' Regional Advisory Board, explained the purpose of the boards to be primarily

to bring representatives of all branches of shippers, consumers, and the public together periodically with the officers of each railroad to determine future transportation needs, the availability of railroad facilities and to settle their mutual questions between

the parties of direct interest in an informal way as is being done between various groups of commercial enterprises.

The smaller shipper or consumer has through the regional boards an opportunity to voice his problems and effect their remedies without cost and on the same basis as the larger shipper or consumer. No railroad men are members of the boards, although regular committees of railroad officers meet with the boards. . . . The problems affecting the railroads and their service are no different in principle from those of any line of industry or agriculture and the same methods of approach and remedy can be applied to them. Much more can be done in the interests of continued efficient service by adopting the American way of voluntary understanding and coöperation than by rigid application of legislative enactments.

The various commodity committees should see that their reports outlining future transportation needs are sent in without undue delay. The Car Service Division wants to know as much about the industries of the territories as possible, we want to consult with shippers and consumers before issuing our orders; tell them why we issue them; we want them to know everything we are doing. Do not wait until a car shortage develops before taking the matter up; see that we are kept fully informed as to your transportation needs. It is your obligation to do this because you know what your needs will be and we want the shippers to tell us through their different committees.²⁰

The program originated with the American Railway Association. On April 5, 1923, the Association adopted a plan to provide adequate transportation service during that year and the program provided for the continuation of public coöperation as one of the steps. Another provision of the program was the establishment of district offices of the Car Service Division of the American Railway Association at strategic points. Each office was placed under the supervision of a district manager and a number of shippers' and consignees' representatives were collected

²⁰ *Proceedings of the First Regular Meeting, Ohio Valley Shippers' Regional Advisory Board, held in the Old Colony Club Rooms, Sinton House, Cincinnati, Ohio, January 7, 1924.*

together into advisory bodies to consult with the district managers as to the transportation requirements of the territories for periods of sixty days in advance so that requirements might be anticipated and car gluts and shortages avoided. The full weight of the authority and prestige of the American Railway Association was thrown behind the Regional Boards and wide publicity given to their work to mobilize public opinion around the activities of the boards. Newspaper publicity, posters, and placards placed in the headquarters of commercial and trade associations, banks, and railroad stations are used to sell the idea of coöperation in securing efficient transportation service to all who use railroad service.

The plan of organization includes, besides the district managers of the Car Service Division of the American Railway Association and their staffs of agents and clerks, a general chairman and an alternate general chairman, a general secretary and a secretary, for each Regional Board. In each region a number of so-called commodity committees, each with a chairman and a vice chairman, have been set up to attend to the transportation needs of the shippers and consignees of the commodity in which the committee specializes. Trade boards also have executive committees, composed of the officers enumerated above, in addition to the chairmen of each commodity committee and a number of general members. Each board has included among the members a number of members at large who may or may not be assigned to commodity committees. Nominations for officers and committee members are made by nominating committees.

Some idea of the magnitude of the work becomes apparent when one glances over the list of commodity committees of a typical Regional Board. One such board has the following commodity committees functioning:

- | | |
|---------------------------------|--|
| 1. Automobile | 24. Leather and Tanning Materials |
| 2. Automotive Parts | 25. Less-Carload Committee |
| 3. Banking | 26. Lime and Gypsum |
| 4. Canned Goods and Preserves | 27. Lumber |
| 5. Cement | 28. Machinery |
| 6. Ceramics | 29. Milk and Milk Products |
| 7. Chemical | 30. Mineral |
| 8. Clay Products | 31. Miscellaneous and General Manufactures |
| 9. Coal | 32. Musical Instrument and Athletic Goods |
| 10. Coffee | 33. Paints, Oils, and Varnishes |
| 11. Confectionery | 34. Paper |
| 12. Copper | 35. Petroleum and Petroleum Products |
| 13. Cordage | 36. Roofing and Roofing Materials |
| 14. Electrical Line Materials | 37. Rubber |
| 15. Electrical Machinery | 38. Salt |
| 16. Fertilizer | 39. Slate |
| 17. Fresh Fruits and Vegetables | 40. Soap, By-Products, and Raw Materials |
| 18. Furniture | 41. Sugar |
| 19. Food Products | 42. Textiles |
| 20. Glass Container and Closure | 43. Tobacco |
| 21. Grain and Grain Products | |
| 22. Ice | |
| 23. Iron and Steel | |

Other committees handle special phases of the work, including terminal problems, warehouse and storage matters, publicity, and export and import matters.

Uniform rules of procedure have been adopted by each Regional Board for the guidance of the business of the board. A general meeting of the secretaries and chairmen of the several boards then in existence drafted the following rules of procedure in meeting at Chicago, November 16, 1923. These rules were recommended for adoption by each Regional Board.

Rules of Procedure Recommended by the Secretarial Committee and Unanimously Adopted at the Chicago Meeting

1. The principal responsibility of the individual commodity committee is to report existing transportation conditions affecting their industry throughout the entire territory at each Board meeting; to render as complete report as possible of subsequent car requirements for as nearly 60 days in advance as practicable; to keep accurate account of the general economic factors affecting the conditions and prosperity of their industry and to report same at each meeting; and to act as a medium for the settlement of disputes between shippers of their commodities and the railroads within the district.

2. Complaints or disputes should be presented, when practicable, to the individual railroad or railroads concerned and every effort possible made to settle such disputes direct with them. In event such disputes or complaints can not be settled with the carrier or carriers direct they shall be presented to the proper standing committee. In handling such complaints or disputes, the standing committee shall themselves deal directly with the interested carrier if the complaint involves only that carrier; that if the complaint be general in scope, involving more than one carrier, the committee shall go into session or negotiate with the representatives of all carriers in the territory, as hereinafter provided; in the handling of all complaints the Officers and Chairmen of all Committees shall work in close coöperation with the District Manager.

3. When problems presented by one Committee overlap those of another Committee, same should be handled jointly by the Committees concerned. Any standing committee desiring to meet with another standing committee, or jointly with the railroads, will notify the Secretary of the Board, outlining in detail the purposes for such meeting.

4. When a committee desires to meet with carriers, request for the meeting should be made to the Secretary of the Board and the reasons therefor fully stated, together with the subjects to be discussed. Except in cases of emergency, at least one week's notice should be given by the committee of its desire for a meeting with the carrier or carriers. The Secretary will arrange the

conference and notify the Chairman and the members of his committee accordingly.

5. The minutes of all meetings of standing committees should be kept for record and submitted at each Board meeting for approval.

6. No publicity should be given the minutes of the meetings of standing committees until same are approved and authorized by the Regional Board.

7. All communications relative to Board matters should be addressed to the Secretary of the Board.¹¹

Meetings of the boards are attended not only by representatives of shippers and consignees of freight and commercial and trade association representatives but by representatives of the American Railway Association, Interstate Commerce Commission, and railroad officers. Problems of interest and concern are fully discussed and the shippers' and the railroads' problems of obtaining and supplying transportation facilities are discussed in open meeting. So successful has the plan proved that in 1923 thirty-eight major questions between shippers and railroads and a host of minor matters were settled to the satisfaction of all concerned by the boards and not a single complaint was made to the Interstate Commerce Commission.¹²

Informal negotiations between the shippers and the railroads through the media of the Regional Advisory Boards have tended to bring the railroads and their patrons closer together and have given to each a fuller appreciation of the problems of the other. These have proved a means of applying preventive rather than curative measures to the relief of transportation problems and have been successful in keeping transportation service cases out of the courts and obviated in large measure the necessity of placing such

¹¹ Minutes, Secretarial Meeting, Regional Shippers' Advisory Boards, Chicago, November 16, 1923.

¹² Donald D. Conn, Manager, Public Relations Division, A. R. A., address before the Ohio Valley Shippers' Regional Advisory Board, January 7, 1924.

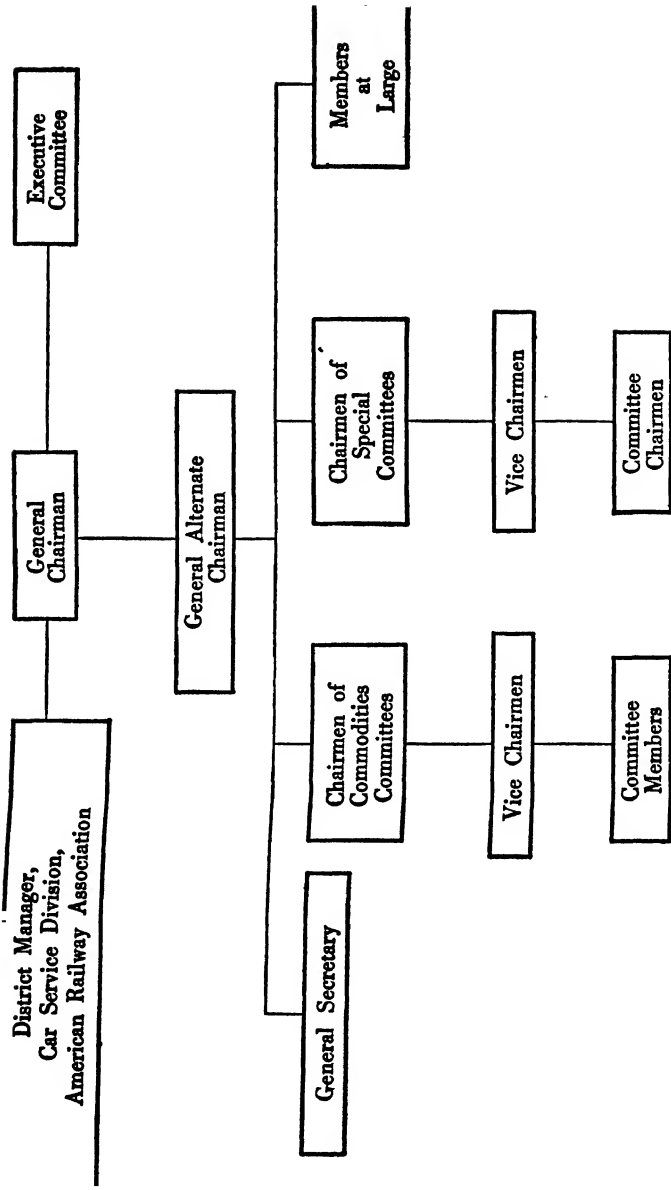


FIG. 70. ORGANIZATION OF A REGIONAL SHIPPERS' ADVISORY BOARD

cases on the dockets of the Interstate Commerce Commission and of the state commissions.

Traffic Clubs

In a number of cities throughout the United States and Canada, traffic clubs have been organized, composed of representatives of industrial and commercial concerns, transportation companies, and trade bodies, to cultivate closer relations between those directly interested in the handling of traffic, both as shippers and carriers, and to promote their best interests. Industrial representatives, in most instances, are the traffic managers, or other representatives having like duties, of industrial or commercial firms or corporations, and the shipping interests are managed by such representatives. Members of these firms or officers of the corporations as well as the actual traffic representatives are eligible to membership.

Transportation companies, including rail and water carriers, and their auxiliary bureaus, may be represented by officers of the freight, passenger, and transportation departments, by general, district, division, and special agents, city freight and passenger agents, commercial traveling and soliciting agents.

Trade bodies, serving the public transportation interests are represented by their selected representatives. This group includes the general secretaries, commissioners of transportation, traffic directors or managers, or other officers of chambers of commerce, boards of trade, commercial exchanges, trade associations, and similar organizations.

Membership in most traffic clubs is divided into three classes, resident, nonresident, and honorary. Resident members include the authorized representatives of industrial concerns, transportation companies, and trade bodies, the places of business of which are located within a radius

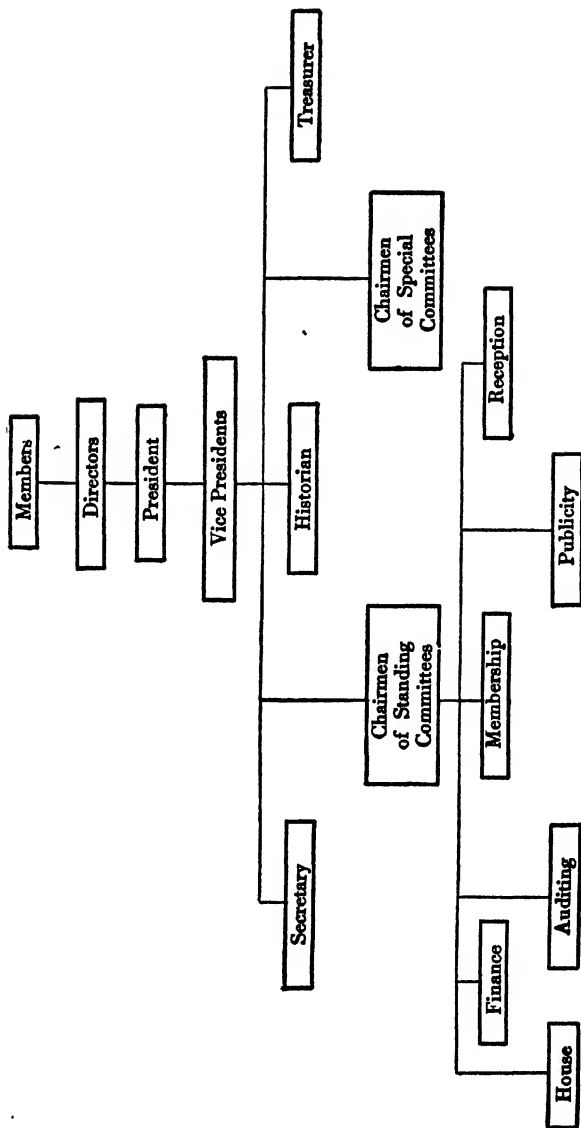


Fig. 71. ORGANIZATION OF A TYPICAL CITY TRAFFIC CLUB

of a given number of miles of the city in which the club is located, or within a given rate district.

Nonresident members consist of similarly qualified persons whose place of business or residence is located elsewhere than within the prescribed area.

Honorary members are often elected to membership in the clubs in recognition of distinctive service of sufficient importance in the interests of the clubs to justify election.

Officers, consisting usually of a president, one or several vice presidents, a secretary, a treasurer, a number of directors, and in some instances a historian or similar officer, are elected for annual terms by vote of the members.

Regular meetings, usually monthly, are held, dividing the fall, winter, and spring months of each year for the transaction of business and for social intercourse among the members. An annual banquet or other social function and in many cases a spring outing are held by many of the clubs.

At a designated regular meeting annually a nominating committee is elected by ballot of the members. This committee selects the nominees for each office and has the names of those selected placed on the ballots before the meeting at which elections are to be held. Additional nominees may be added to the ballot at the joint request of a given number of members. The president, vice presidents, and historian, or similar officer, usually serve for one year only, while the secretary and treasurer usually are continued in office for longer terms. All officers are elected annually except the directors, who in most clubs are elected for longer terms, part of the board being elected each year for two- or three-year terms. Vacancies in the offices are usually filled for the unexpired term by the board of directors, executive committee, board of governors, or similar body.

Organization charts, illustrating the mode of organiza-

tion of a typical big city traffic club and the organization of the Traffic Club of Pittsburgh, Pennsylvania, one of the prominent traffic clubs of the United States, are shown in Figures 71 and 72. Variations from the organizations outlined in these two charts may be considered exceptions to the usual plan of organization. The duties of the various officers and committees shown in these outlines will be discussed more fully below.

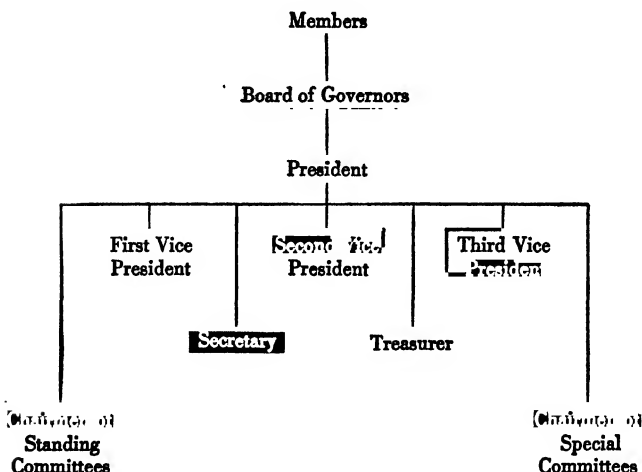


FIG. 72. ORGANIZATION OF THE TRAFFIC CLUB OF PHILADELPHIA

The duties of the officers of the various traffic clubs are so similar that generalization is safe. The president of the typical traffic club presides at all regular and special meetings of the club and of the board of directors, board of governors, or executive committee or similar body. He also appoints all regular or standing and special committees and usually approves drafts on the treasurer for authorized expenditures of the club.

A vice president, the first if the several vice presidents are ranked as first, second, third, and so on, or one of the several vice presidents selected by those present if all are of equal rank, presides in the absence of the president and performs his other duties as his deputy.

The secretary of the typical club keeps the minutes of all regular and special meetings of the club and of the board; all correspondence, notices of meetings, notification of members of their appointment to committees and to offices, and similar secretarial duties are performed by this officer. He also keeps the membership roll, receives applications for membership and cares for club property intrusted to him. Many of the larger clubs pay their secretaries nominal salaries and exempt them from the payment of membership dues.

The collection and custody of fees, dues, and other funds of the clubs are intrusted to the treasurers. This office banks the club's funds in an approved bank and disburses the funds on vouchers approved, usually, by the president, secretary, and in some cases by the board. Reports of receipts and expenditures are made at regular meetings and a detailed statement of finances made from time to time to the board, and an annual statement made for the information of members. In many instances, when the receipts of the club amount to considerable sums of money, the treasurer is bonded. The larger associations often exempt the treasurer from the payment of membership dues and in some instances pay him a nominal salary.

The boards of directors or governors or executive committee of the clubs exercise broad powers of supervision over the management of the affairs of the organizations. The board of the typical club controls and manages the property of the club and approves such actions as it deems advisable for the interests of the club. The power of in-

terpreting the constitution, by-laws, or rules is usually vested in the board.

The historian, when such an officer is provided for in the club constitution, collects and presents items of interest to the club and preserves documents and records in the club's archives.

The constitutions of many clubs provide for a number of standing committees to be appointed by the presidents of the clubs and for the appointment of special committees deemed necessary for the proper conduct of the affairs of the clubs at the discretion of the presidents.

A house committee is usually provided for, to attend to the management of the club quarters, if permanent quarters are maintained, or to make arrangements for meeting places if the club has no regular quarters. Menus for dinners and luncheons, decorations, and other matters of creature comfort are attended to by such committees. In some instances, a special auxiliary committee is appointed to obtain speakers or entertainers for each meeting and to act with the house committee in arranging for each meeting.

The board of directors or governors or the executive committee is usually called upon to approve the estimates of expenses for the entertainment obtained.

A reception committee is included among the standing or special committees of most clubs to attend to the reception of members and guests of the club and the comfort and entertainment of invited guests and speakers.

A publicity committee is part of the equipment of many clubs, so that the press, including local newspapers, technical transportation journals, and other periodicals may be informed as to the doings of the clubs. All matters for publication are usually reviewed by the board of directors or similarly constituted governing body.

The typical membership committee receives applications for membership from the club secretary and reports upon

the applications to the board of directors or executive committee for final action. Records, membership rolls, and similar data are usually kept by such membership committees.

A finance committee prepares budgets of anticipated annual receipts and expenditures so that the income of the club may be sufficient to meet the expenditures or the expenditures cut down so as to come within the anticipated income. Extraordinary expenditures which arise from time to time are usually submitted to the finance committee as well as to the board of directors or governors or executive committee for approval. In some instances a two-thirds vote of the members of the board is necessary to approve extra-budget expenditures.

An auditing committee is usually included among the standing committees to audit the accounts and vouchers of the treasurer and report annually or semiannually to the members as to the condition of that officer's accounts.

Special committees are found in great number and almost endless variety among the various clubs so as to make analysis impracticable. These committees are usually appointed for special purpose and pass out of existence after performing the functions for which they are created.

Reduced to a sentence, the function of traffic clubs in the field of transportation is to foster a professional spirit of solidarity among the workers in the several departments of transportation and they are successful to the extent to which they develop this spirit. Through the instrumentality of traffic clubs, representatives of industrial and commercial concerns, railroads, steamship companies, express companies, warehouse companies, motor-truck lines, stevedoring companies, trade bodies, trade associations, and traffic bureaus are bound together into a compact body, resembling in many respects an informal professional association. These clubs, although largely

social in nature, are nevertheless important business institutions in the field of transportation.

The national federation of traffic clubs, the Associated Clubs of America, have within the past several years done important work in presenting the point of view of railroad, steamship, express, motor, and industrial and commercial traffic men to state legislatures and to Congress to aid in obtaining favorable transportation legislation.

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